



External and internal climate change policies for export credit and insurance agencies

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Abstract

Export credit agencies (ECAs) are either private companies operating on behalf of their country's government or are governmental agencies themselves which in either case, provide support to promote domestic companies' international export of goods and services. ECAs are a hitherto under-researched contributor to lock-in of fossil fuel infrastructure. This study reviews external policies and standards as well as internal policies and commitments that may affect ECAs' portfolios – specifically their support to fossil fuel and low-carbon technology projects. Most international standards are applied on a purely voluntary basis. Moreover, they are mainly focused on increasing transparency and promoting social and environmental safeguards while not directly affecting the ECAs' portfolios. Most importantly, none of them has explicit requirements to phase out support to fossil fuels and align operations with the Paris Agreement. The standards thus do not support fossil fuel project support phaseout.

Only few of the countries covered in this study made explicit commitments and put in place policies that may affect the portfolios of their ECAs with regards to their support for fossil fuels. Most of the ECAs reviewed in this study have made broad statements and commitments related to social and environmental sustainability – mostly through their CSR strategies and reports. However, only a few ECAs made explicit commitments related to climate change and most importantly to phasing out support for fossil fuels. While most ECAs have made at least some commitments related to coal, only a few of them made such commitments for the oil and gas sector (usually with no concrete timeline). Overall, most ECAs seem to be at a very early stage of taking climate change considerations seriously and integrating them into their business strategies or global value chain. As a result, many of the reviewed ECAs still provide significant support to fossil fuels and little support to low-carbon projects. None of the ECAs reviewed in this study is therefore in line with the long-term objectives of the Paris Agreement.

As public finance institutions ECAs must be aligned with their governments' climate change mitigation commitments and the Paris Agreement. We therefore recommend that the national governments:

1. At minimum, introduce policies mandating their ECAs to only finance activities in line with their NDCs, the NDCs of the host countries as well as with their bi- and multilateral climate finance. Ideally, these policies must also be in line with the overall objectives of the Paris Agreement.
2. Increase transparency of their ECAs, notably making public their support provided to carbon-intensive activities and associated GHG emissions of their portfolios in line with the TCFD.

With regard to specific regional approaches and policies, we recommend that:

1. The EU governments ensure the EU policies for ECAs are reflecting the EU's own climate commitments as well as well the long-term objectives under the Paris Agreement, similar to the approach applied recently by the European Investment Bank (EIB).
2. The OECD member states should strengthen the OECD Coal-Fired Electricity Generation Sector Understanding (CFSU) beyond the current threshold of 750g CO₂/kWh, ideally to exclude any new coal power investments. The CFSU must further be expanded to all coal-related projects as well as the oil and gas sectors.

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Abbreviations

CCS	Carbon Capture and Storage
CCSU	Climate Change Sector Understanding
CFSU	Coal-Fired Electricity Generation Sector Understanding
CIO	Climate Investor One
COP	Conference of the Parties
CSR	Corporate Social Responsibility
DFI	Development Finance Institution (FinDev Canada)
DGGF	Dutch Good Growth Fund
DTIF	Dutch Trade and Investment Fund
E&S	Environmental and social
EAC	Environmental Audit Committee
EBRD	European Bank for Reconstruction & Development
ECA	Export Credit Agency
EDC	Export Development Canada
EKF	Eksport Kredit Fonden
EKN	Swedish Export Credit Agency
EPs	Equator Principles
ESHR	Environmental, social and human rights standards
ESPS	Environmental and Social Performance Standards (IFC)
FMO	Financierings-maatschappij voor Ontwikkelingslanden
FSB	Financial Stability Board
GHG	Greenhouse Gas Emissions
GME	Guidelines for Multinational Enterprises
IEA	International Energy Agency
IDC	International Development Committee
IDRC	International Development Research Centre
IFC	International Finance Corporation
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
MDB	Multilateral Development Bank
MNE	Multinational Enterprise
MRV	Measurement, Reporting and Verification
NDC	Nationally Determined Contribution
OECD	Organization for Economic Co-operation and Development
PA	Paris Agreement
PCR	Perspectives Climate Research
PPCA	Powering Past Coal Alliance
RES	Renewable Energy Sources
SBTi	Science Based Target initiative
SDGs	Sustainable Development Goals
SEK	Swedish Export Credit Corporation
SME	Small and Medium Enterprises
TCFD	Task Force on Climate-Related Financial Disclosures
UKEF	UK Export Finance agency
UN	United Nations
UNFCCC	United Nation Framework Convention on Climate Change

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1. Introduction

1.1. International context

The 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris in December 2015 marked an historical turning point in the fight against climate change. The Paris Agreement (PA) established global mitigation and adaptation targets – limiting temperature increase well below 2°C, with efforts to contain the temperature increase within 1.5°C (Article 2.1a) and increasing the ability of our societies to adapt to climate change (Article 2.1b). Moreover, a balance of greenhouse gas (GHG) emissions by sources and removal by sinks is to be reached by the second half of the century (Art 4.1) (UN, 2015).

Achieving these objectives requires, among other measures, a large-scale transformation of the energy system, including power generation, transportation systems and fossil fuel exploration and extraction. In its 1.5°C scenarios the Intergovernmental Panel on Climate Change (IPCC) projects a rapid decrease of the share of fossil fuels in the global energy supply and suggest that renewables should supply 70–85% of all electricity by 2050 (IPCC, 2018). Similarly, in its REmap Case, a scenario for the global energy system which is consistent with the “well below 2°C” target, the International Renewable Energy Agency (IRENA) envisages 86% of power generation coming from renewable energy sources (RES) by 2050, compared to 24% in 2016, while the share of electricity in final energy would increase to almost 50% by 2050 from just 20% today (IRENA, 2019). Moreover, large-scale transformations are required in the transport sector. For example, in its 2°C scenario the International Energy Agency foresees that 90% of all cars on the road will be electric by 2060 (IEA, 2017). Massive investments in infrastructure to support the electrification of the transport sector as well as in the development of low-carbon public transport systems will be required.

Achieving the low-carbon and climate resilient transition thus requires massive reorientation of investment flows, especially within the power generation, transport and buildings sectors, and reduction of investments in fossil fuel exploration and extraction. This entails significant changes in the lending and insurance policies of financial institutions, which relates to both increasing funding for low-carbon infrastructure and reducing funding of carbon-intensive infrastructure. The latter is crucial to prevent lock-in effects linked to the lifetime of the financed infrastructures which can reach many decades.

Regarding the first aspect, the objective of scaling-up climate-compatible finance is enshrined in Article 2.1c of the PA: “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (UN, 2015). In fact, reaching both mitigation and adaptation targets – Articles 2.1a and 2.1b respectively – is conditioned by achieving target 2.1c, as pointed out by the 1.5°C report of the IPCC (2018). For instance, the annual average investment needs in energy supply and energy demand would amount to USD 2.1 to 4.4 trillion between 2016 and 2035, in a scenario without new climate policies beyond those already in place (ibid).

Industrialized countries committed to support developing countries through the provision of *international climate finance*. Prior to the adoption of the PA, developed countries committed in Cancun to mobilize USD 100 billion per year up to 2020 from both public and private sources. The PA stipulates in its Article 9 that developed countries are now mandated to “take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels” that “should represent a progression beyond previous efforts” (UN, 2015).

Regarding the second aspect, *net climate finance*, which can be defined as the value of climate finance flows minus financial flows to high-emissions and maladaptive activities, continues to be heavily skewed toward dirty investments (Bodnar et al., 2017) and thus risks a significant lock-in effect. For example, the IEA (2018) estimates that the share of fossil fuels, including thermal power generation, in energy supply public and private investment still accounts for 59% globally with USD 716 billion flowing to oil and gas supply, and USD 79 billion to coal supply in 2017. In this light, international public finance for carbon-intensive projects goes directly against the commitments of Parties to the UNFCCC under the PA.

1.2. Problem definition

The OECD (2018) estimated that public climate finance from developed to developing countries increased from USD 37.9 billion in 2013 to USD 54.5 billion in 2017. Including climate-related officially-supported export credits changes these figures to USD 39.5 billion in 2013 and USD 56.7 billion in 2017. At the same time, it was estimated that G20 countries provided at least USD 38 billion in public financing for overseas coal projects from 2013 to 2016 and only USD 25 billion for overseas renewable energy projects in the same period (Chen and Schmidt, 2017). Additionally, it was estimated that from 2016 to 2018, Export Credit Agencies (ECAs) of G20 countries provided USD 31.6 billion annually to support fossil fuel projects (DeAngelis and Tucker, 2020).

The breakdown of the public finance portfolio for high carbon projects varies drastically depending on the institution. An earlier study for the period of 2013-2016 found that while Multilateral Development Banks (MDBs) provided less than USD 1.5 billion to coal projects, other public finance institutions such as ECAs as well as bilateral finance institutions have provided USD 40 billion and USD 15 billion respectively to coal projects, over the same time period (NRDC, 2017).

Over the past two decades, MDBs' climate action received significant attention from policymakers, researchers, NGOs and the general public. For example, the search of the HEC Paris Library database using keywords in publication titles “Development Bank” OR “World Bank” AND “Climate Change” OR “Carbon” yields more than 1000 publications. Conversely, the search using keywords in publication titles “Export Credit” AND “Climate Change” OR “Carbon” yields less than 10 publications. There have been several publications on ECAs and climate change by NGOs such as Oil Change International (see DeAngelis and Doukas, 2017 and DeAngelis and Tucker, 2020), Natural Resources Defense Council (see Chen and Schmidt, 2017) and ECA Watch, but these are dwarfed by the amount of attention that MDBs receive. Similarly, numerous side-events at

international climate fora – such as COPs, climate summits, regional carbon forums and climate finance events – focus on MDBs’ and bilateral public finance institutions’ – such as, for example, German KfW and French AFD – climate action every year, while there are virtually no side-events discussing ECAs’ climate action. Finally, while all MDBs now have quantitative climate-related commitments and comprehensive climate strategies to achieve them, there are few commitments related to ECAs. One example is the U.S. Export-Import Bank that decided in 2013 to cease using public funds to support new coal power investments. However, the U.S. Export-Import Bank – similarly to most other ECAs – continued financing coal mines and other fossil fuel supply infrastructure (Lazarus et al., 2015).

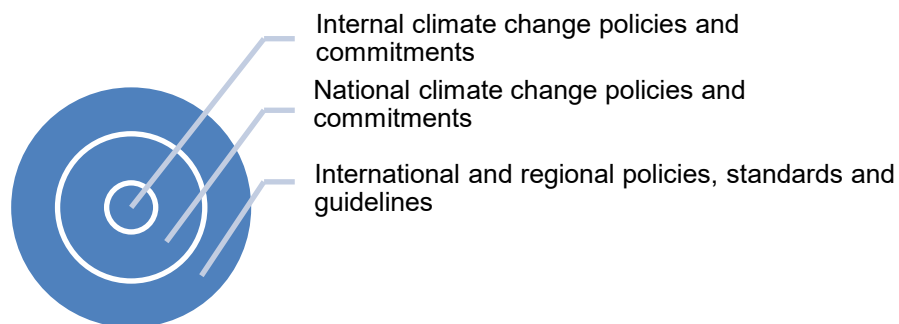
Overall, it appears that ECAs’ operations and their policies are rather opaque and less transparent than that of MDBs. Moreover, methodological discussions regarding accounting for export credits and their possible mobilization effect in the context of climate finance monitoring and reporting are at a nascent stage (Jachnik et al., 2017). This gap is particularly glaring given that ECAs provide almost twice the amount of international public finance compared to MDBs and also given that some researchers and NGOs attempted to flag the issue already in the early 2000s (see, for instance, Maurer and Bhandari (2000) and Mühlenhoff (2004)). There is thus an urgent need to draw more attention of the climate finance community, as well as broader high-level policymakers and the general public to this issue.

1.3. Objectives, scope and methodology of the study

The main goal of this study is to improve the current state of knowledge about internal policies and commitments of ECAs regarding GHG emissions intensity of their portfolios and external – national and international – climate change policies, standards and guidelines affecting ECA decision-making regarding GHG emissions characteristics of their portfolios. This includes a review of internal climate change policies and commitments of ECAs, as well as external policies – e.g. those recently introduced by the OECD regarding coal-fired power plant investments¹ - and international standards – e.g. UN Global Compact – that may impact ECAs’ operations with regards to their support for fossil fuels – against the objectives of the PA. The study thus looks at three levels of policies (see Figure 1 below).

¹ As of January 2019, OECD guidelines for large coal-fired power plants allow financing of only ultra-supercritical technologies, or with an emissions intensity below 750 g of carbon dioxide per kilowatt hour (CO₂/kWh).

Figure 1: Three levels of policies that affect ECAs



Understanding these policies, standards and commitments will allow to identify gaps and provide recommendations with regards to their alignment with the PA in the future. It will also provide basis for advocacy activities to advance both the public policy debate and a conversation with ECAs regarding their internal practices. In terms of the geographical scope, the research will be limited to ECAs in seven countries: Canada, Denmark, France, Germany, the Netherlands, Sweden and the UK. These countries were selected due to their membership in the OECD, their increasing climate ambition and information availability.

The methodology of this study is based on desk research and includes a review of the following literature sources:

- *Relevant public documents from ECAs*, such as annual reports, websites and documents concerning their risk assessment practices, social and environmental safeguards, relevant internal policies, etc.
- *“Grey” literature* from highly reputed sources, such as international organizations, internationally recognized think-tanks and research institutions, financial institutions related to the trade finance and insurance and highly reputed NGOs.
- *Peer-reviewed literature* (if available) from high-profile thematic journals notably related to experiences with climate change mainstreaming in public finance institutions.

The remainder of the study proceeds as follows. Section 2 reviews external policies – e.g. introduced by the OECD and other national and/or international policies – that can affect ECAs’ support for fossil fuels. Section 3 reviews the existing national and internal climate change policies and commitments of ECAs and assesses them against the objectives of the PA. Section 4 summarizes the key findings of the study and Section 5 provides policy recommendations.

2. Overview of international climate change policies affecting ECAs

This section provides a brief introduction into the operations of ECAs before reviewing the key international policies and initiatives that may affect ECAs' support for fossil fuel and low-carbon investments.

2.1. Definition and business operations of ECAs

Export credit agencies (ECAs) are either private companies operating on behalf of their country's government or are governmental agencies themselves which in either case, provide support to promote domestic companies' international export of goods and services (OECD, 2019c). An ECA provides government-backed loans, financial guarantees (a.k.a. pure cover) or credit insurance, depending on the mandate it received by its government. Thomson Reuters (2019) defines the different products of ECAs as follows:

- **Loans:** The ECA provides a loan to the overseas purchaser of an exported good or service to enable the purchaser to finance the purchase.
- **Guarantees:** The ECA provides a guarantee to the lenders financing the purchase of an exported good or service, guaranteeing repayment of their loan in certain circumstances. This guarantee lowers the risk of a transaction and allows lenders to enter into financing which might otherwise not be possible, due to credit or jurisdictional issues. Alternatively, the ECA may guarantee a loan made to an exporter in order to facilitate exports.
- **Insurance:** The ECA provides insurance (and sometimes reinsurance) to exporters against non-payment by the overseas purchasers of their products/services. An ECA may also provide political risk insurance to companies based in its jurisdiction investing overseas.

In a nutshell, the main objective of an ECA is to support and encourage domestic companies to export more (Roy, 2017). Being essentially public finance institutions, ECAs may be affected by the international policies and guidelines. This section of the study provides a brief overview of the most relevant international policies and guidelines that may affect ECAs' operations. How these policies are applied in practice by selected ECAs is then discussed in Section 3.

2.2. OECD based standards and regulations

The main aim of the Organization for Economic Co-operation and Development (OECD) is to promote and enhance economic growth, social development and environmental sustainability (OECD, 2019a). In this context, the OECD developed various guidelines for ECAs as well as for international institutions and multinational enterprises (MNE) including recommendations with principles and standards for sustainable and responsible business activities. These guidelines are briefly presented below.

2.2.1. The Arrangement on Officially Supported Export Credits

Since 1963, the OECD is involved in rulemakings in the area of officially supported export credits. One of its main involvements is *“the Arrangement on Officially Supported Export Credits”, also known as “the Arrangement” which provides a forum for “maintaining, developing and monitoring the financial disciplines for export credits”* (OECD, 2019c). The Arrangement – for the first time agreed in 1978 - specifies restrictions and conditions (e.g. repayment terms, minimum premium rate, minimum interest rates) for the provision of export credits. These rules are being discussed on a regular basis by “the Participants to the Arrangement on Officially Supported Export Credits (the “Participants”)", composed of Australia, Canada, the European Union, Japan, Korea, New Zealand, Norway, Switzerland, Turkey, and the United States.

2.2.2. OECD Sector Understandings for Climate Change Sector (CCSU) and Coal-Fired Electricity Generation (CFSU)

There are currently six OECD Sector Understandings, which are part of the above-mentioned Arrangement on Officially Supported Export Credits and which comprise additional sector-specific rules. Covered areas are (I) ships, (II) nuclear power plants, (III) civil aircraft, (IV) renewable energy, climate change mitigation and adaptation, and water projects, (V) rail infrastructure, and (VI) coal-fired electricity generation projects. Below we look at the two Sector Understandings most relevant to the topic of this study.

The Renewable Energy, Climate Change Mitigation and Adaptation and Water Projects Sector Understanding (CCSU) was specified in 2012 and recognizes exports of climate/energy-friendly technologies and projects which contribute to climate change mitigation, reduction of GHG emissions etc. as particularly deserving of promotion. Exports in this category can for example, supported with longer credit periods of up to 18 years or lower interest rates.

In 2016, the OECD developed the Coal-Fired Electricity Generation Sector Understanding (CFSU), which provides stricter terms and conditions for the provision of officially supported export credits relating to coal-fired electricity generation projects. This annex is meant to encourage both exporters and buyers of coal-fired power plants to move away from low-efficiency towards high-efficiency technologies by limiting export credit support for coal-fired power plants. However, it does not mandate the phase out of export support to coal-fired power plants completely, neither does it affect the support for upstream coal projects. Following an extension of the OECD guidelines in 2019, financing is only allowed for large coal-fired power plants with ‘ultra-supercritical technology,’ or with an emissions intensity of below 750g CO₂/kWh of electricity produced. This would exclude every operating coal-fired power plant in Australia and India (Climate Transparency, 2019).

2.2.3. OECD Guidelines for Multinational Enterprises

The OECD Guidelines for Multinational Enterprises (GME) cover all impacts from enterprise activities: human rights, disclosure for business activities, corruption, research and innovation (OECD, 2019a). There are two OECD guidelines' principles linked to the environmental impacts. The first one is public acknowledgement of the multinational enterprise's activities and project portfolio. This principle encourages enterprises to commit to disclosure of their activities and reporting them annually. The second one covers the commitment to enhance prevention and mitigation of the possible negative impacts on the environment and development (Ministry of Economic Affairs and Employment of Finland, 2017). The GME provide general ideas and recommendations for sustainable business activities meant to help enterprises to develop the environmentally meaningful and economically efficient policies, for example, by means of partnerships or initiatives that will enhance environmental awareness and protection. According to the GME, the companies should (OECD, 2019a):

- Contribute and promote social development, economic growth and environmental sustainability; and continuously improve corporate environmental performance:
 - adoption of new technologies and operating procedures in all parts of the enterprise;
 - development and provision of products or services which are energy and resource efficient with low environmental impacts, and/or reduce GHG emissions;
 - increase awareness among clients for the potential environmental impacts in relation with business activities.
- Develop an environmental management system with applicable Monitoring, Reporting and Verification (MRV) approach for the enterprise to assess its environmental, health, and safety impacts of their activities; and establish conditional targets, objectives in accordance with the national policies and environmental commitments.
- Develop the plans to prevent, mitigate and control serious environmental and health impacts.

2.2.4. OECD Recommendation of the Council on Environmental and Social Due Diligence for officially supported export credits (“Common Approaches”)

This set of the OECD recommendations (referred to as “Common Approaches”) created in 2012, applies to all types of ECAs with a repayment term of two years or more. They aim to guide ECAs in how to integrate environmentally and socially responsible business practices into their business operations by applying environmental and social due diligence (OECD, 2016). OECD recommendations encourage ECAs, enterprises and financial institutions to identify and address their potential environmental and social risks and impacts. The recommendations are not applicable

for businesses, which have a focus on the export of military equipment or agricultural commodities. The OECD recommendations promote and facilitate consistency of ECAs' institutional policies with regards to international, environmental, climate change, social and international legislative framework with sustainable development. OECD recommendations include the following main points relevant for ECAs:

- Develop and undertake common procedures and processes relating to the environmental and social review;
- Develop common procedures and processes relating to the review and assessment of the ECAs' processes and their clients for projects and existing operations;
- Prevent and mitigate adverse environmental and social impacts and risks from the projects;
- Promote awareness of the GME;
- Encourage disclosure of the relevant environmental and social impact information.

ECAs are required to announce and monitor their procedures of implementation of the OECD Common Approaches coupled with information on the Category A and B projects. The process of results monitoring on OECD Common Approaches is done through (OECD, 2019c):

- Annual responses from the members on the applied environmental and social policies and practices;
- Disclosure of the members' approved projects' portfolios with high and medium environmental or social risks and impacts (Category A and B)

Additionally, OECD recommendations also provide a categorization of the projects to help ECAs identify and categorize their projects' portfolio based on the severity of the environmental and social impacts. The three categories are the following (OECD, 2019b)

- Category A: a project is classified as Category A if it has the potential to have significant adverse environmental and/or social impacts, which are diverse, irreversible and/or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Category A, in principle, includes projects in sensitive sectors or located in or near sensitive areas.
- Category B: a project is classified as Category B if its potential environmental and/or social impacts are less adverse than those of Category A projects. Typically, these impacts are few in number, site-specific, few if any are irreversible, and mitigation measures are more readily available.
- Category C: a project is classified as Category C if it has minimal or no potentially adverse environmental and/or social impacts.

The interpretation of these categories, however, may differ significantly as demonstrated by their application by different ECAs (see Section 3).

2.3. Task Force on Climate-related Financial Disclosures

Set up in 2015 by the Financial Stability Board (FSB), the Task Force on Climate-related Financial Disclosures (TCFD)² was developed to encourage companies to expand their disclosures by including climate-related risks as part of their financial reports which will thereby, increase transparency in corporate climate reporting and provide more valuable information to stakeholders (investors, lenders, insurers etc.). To be precise, the TCFD formulated recommendations on how companies can better analyze and assess the opportunities and risks arising from climate change in terms of the impact on their business activities and make these risks/opportunities more visible.

Climate-related risks as defined by the TCFD are divided into physical risks (risks related to the physical impacts of climate change, e.g. natural disasters) and transitory risks (risks related to the transition to a lower-carbon economy, e.g. regulatory measures such as a carbon tax). Climate-related opportunities on the contrary are defined as opportunities that arise because of efforts to mitigate and adapt to climate change, e.g. through resource efficiency, adoption to low-emission energy sources, new products and markets etc. The recommendations are thus classified into four subject areas: governance, strategy, risk management as well as metrics and targets (see Figure 2 below) and are meant to be applicable to organizations across sectors and jurisdictions. Importantly to mention, the recommendations apply mostly to financial-sector organizations but partially also to non-financial sector companies.

Figure 2: Recommendations of the Task Force on Climate-related Financial Disclosures

Governance	Strategy	Risk Management	Metrics and Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Recommended Disclosures	Recommended Disclosures	Recommended Disclosures	Recommended Disclosures
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	a) Describe the organization's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	b) Describe the organization's processes for managing climate-related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Source: TCFD (2017)

² <https://www.fsb-tcfd.org/>

As of September 2019, the TCFD was supported by 867 organizations. However, the Export Development Canada (see Section 3.1) is the only export credit agency within the scope of this study which supports the initiative.

2.4. Equator Principles

The Equator Principles (EPs)³ are a risk management framework for financial institutions to manage, identify and address social and environmental risks of their financial products. The ten EPs address the following topics (Equator Principles, 2006):

- Principle 1 “Review and Categorisation”: review and categorization of the project as per environmental effects in accordance to the International Finance Corporation (IFC) Performance Standards (see Section 2.5).
- Principle 2 “Environmental and Social Assessment”: identify possible social and environmental impacts and risks of the proposed project.
- Principle 3 “Applicable Environmental and Social Standards”: address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues.
- Principle 4 “Environmental and Social Management System and Equator Principles Action Plan”: develop or maintain an Environmental and Social Management System (ESMS).
- Principle 5 “Stakeholder Engagement”: cooperate with stakeholders such as affected communities, indigenous people etc. for example by conducting a Consultation and Participation process.
- Principle 6 “Grievance Mechanism”: enable affected communities and others to address concerns and grievances about the project’s environmental and social performance.
- Principle 7 “Independent Review”: an independent party not associated to the client has to review compliance with principles.
- Principle 8 “Covenants”: for all projects, the client will formally state in the financing documentation to comply with all relevant host country environmental and social laws, regulations and permits in all material respects.
- Principle 9 “Independent Monitoring and Reporting”: requires that the client retains qualified and experienced external experts to verify its monitoring information which would be shared with the financial institution.
- Principle 10: Reporting and Transparency: ensure transparency and data availability on e.g. GHG emissions of the project.

The EPs aim to encourage the adoption of best practice in financial institutions by integrating social and environmental factors into their due diligence and decision-making processes. They are

³ <https://equator-principles.com/>

applicable to all industry sectors and to four financial products such as project finance and project-related corporate loans (relevant for ECAs). In 2019, 99 financial institutions from 37 countries committed to implementing EPs in their social and environmental policies, standards and procedures and agreed not to provide products and/or services to clients which are not complying with the EPs, and reported to the EPs (Equator Principles, 2019a).

Four of the eight ECAs examined in this study (Export Development Canada, Eksport Kredit Fonden, The Swedish Export Credit Corporation and UK Export Finance) have committed to the EPs (see Section 3).

2.5. IFC's Environmental and Social Performance Standards

IFC's Environmental and Social Performance Standards (IESPS)⁴ identify the responsibilities and commitments of IFC's clients for managing their environmental and social risks. ESPS come under the IFC's Sustainability Framework, which commits to sustainable development approaches. Standards apply to all the IFC investment and advisory clients, as well as other financial institutions who would like to use environmental and social performance standards for the development of their policies and standards (IFC, 2012). ESPS include rules to identify, avoid, mitigate and manage risks and impacts to conduct their businesses in a more sustainable manner. Standards also cover capacity building among stakeholders and disclosure obligations of the client in relation to project-level activities. Clients of IFC need to apply those standards to manage their social and environmental risks.

The ESPS include eight standards related to labour and communities, environment, risks, resources and heritages. They are the most complete standards in terms of step-by-step policy development and implementation, capacity building, measurement and reporting of the companies' activities. The main performance standards related to environmental aspects are highlighted below (IFC, 2012):

- Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Performance Standard 3: Resource Efficiency and Pollution Prevention
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

In addition to the ESPS, IFC applies categorization of the projects based on their environmental and social impacts. IFC' categorization identifies the degree of severity from the projects' risks and impacts. Companies and financial institutions should categorize projects and disclose their projects'

⁴https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

portfolio in accordance with IFC's Access to Information Policy (IFC, 2019a). The IFC categories mirror the OECD categories (Section 2.1) discussed earlier:

- Category A: Business activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.
- Category B: Business activities with potential limited adverse environmental or social risks and/or impacts that are few, generally site-specific, largely reversible, and readily addressed through mitigation measures.
- Category C: Business activities with minimal or no adverse environmental or social risks and/or impacts.
- Category FI: Business activities involving investments in financial institutions (FIs) or through delivery mechanisms involving financial intermediation. This category is further divided into:
 - FI-1: when an FI's existing or proposed portfolio includes, or is expected to include, substantial financial exposure to business activities with potential significant adverse environmental or social risks or impacts that are diverse, irreversible, or unprecedented.
 - FI-2: when an FI's existing or proposed portfolio is comprised of, or is expected to be comprised of, business activities that have potential limited adverse environmental or social risks or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures; or includes a very limited number of business activities with potential significant adverse environmental or social risks or impacts that are diverse, irreversible, or unprecedented.
 - FI-3: when an FI's existing or proposed portfolio includes financial exposure to business activities that predominantly have minimal or no adverse environmental or social impacts.

2.6. Limited impact of international policies on the portfolio of ECAs

The objective of this section was to reflect on international climate change policies and standards affecting ECAs and to introduce the most important international environmental and social (E&S) standards, namely various OECD guidelines, the TCFD, the Equator Principles and the IFC ESPS. While all of the ECAs within the scope of this study are committed to at least one of the E&S standards presented above, their support for the fossil fuel industry remains significant (see Section 3). This fact raises the question whether E&S standards are of help to phase-out fossil fuel investments since they still enable export credits to be used for supporting fossil fuel operations.

The international guidelines presented only recommend alternatives to fossil-fuel power plants, include emission efficiency guidelines or, in the case of the OECD guidelines, include recommendations on excluding certain types of coal-fired power plants (Swedish Society of Nature Conservation, 2019). Moreover, all of the policies discussed above are voluntary and thus their implementation to date cannot be enforced. A report by UNEP argues that financial institutions such as ECAs commit to standards such as the Equator Principles for reputational reasons and risk management rather than for contributing to a change in business (UNEP Inquiry, 2016). Moreover, the voluntary codes are often phrased in a very generic manner and lack specificity. Most importantly, none of them provides for explicit requirements to phase out support to fossil fuels and align operations with the PA. In a report from 2016, Both ENDS compared the OECD Guidelines for MNEs to the Common Approaches and highlighted how the latter leave ECAs with more freedom and possibilities for exceptions from imposed rules than the Guidelines do to for MNEs. For example, only exports with repayment term longer than two years are covered by the Common Approaches while the majority of global exports are having a payback time for less than that. Moreover, disclosure to the public from ECAs is only necessary at a fraction of the information that needs to be disclosed from MNEs.

In a nutshell, overly generic wording, lack of enforcement, , and lack of explicit guidelines on phasing out support for fossil fuels are key weaknesses of most standards.

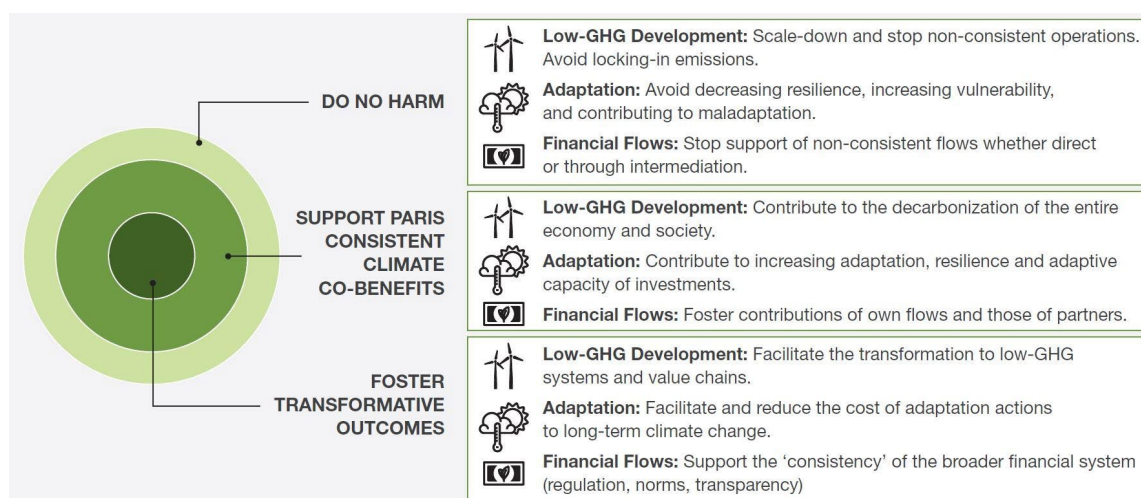
3. Internal climate change policies and commitments of ECAs

This section of the report reviews the existing climate change policies and commitments of ECAs and assesses them against the objectives of the PA. In order to facilitate the comparison among countries, the review follows a standardized review template that includes the following key elements:

- Summary of the geographical and sectoral scope of the ECA's activities.
- Overview of the ECA's support for fossil fuel projects and low-carbon projects (if available).
- Summary of the key national climate change policies and commitments relevant for ECAs.
- Summary of the key internal climate change policies and commitments of the ECA.
- Assessment of the alignment of the above commitments with the PA.

Different frameworks may be used to assess the alignment of ECAs' policies with the PA. For example, I4CE – Institute for Climate Economics suggests an alignment framework for financial institutions across three dimensions: mitigation, adaptation and finance and three levels of ambition: (i) scaling-down and ceasing operations not consistent with the PA, (ii) contributing to low-carbon and climate resilient development, and (iii) foster transformative low-carbon projects (Figure 3).

Figure 3: Paris Agreement alignment framework for financial institutions



Source: Cochran and Pauthier (2019)

Adapting the logic of this framework to the specificities of the ECAs' operations we suggest the following assessment criteria:

- Scaling-down and ceasing operations not consistent with the PA, such as support to fossil fuel investments: coal, oil and gas (across the value chain including upstream and downstream).

- Contributing to low-carbon and climate resilient development by supporting low-carbon and/or climate resilient investments.
- Commitments to international policies and standards discussed in Section 2.

3.1.Canada: Export Development Canada (EDC)

3.1.1. Overview of operations

Export Development Canada (EDC)⁵ supports national direct investment abroad and into Canada; provides insurance and financial services, bonding products; and guides small and medium enterprises (SME) to leverage strong financial relationships with international buyers to stimulate them to procure from Canadian suppliers. While in the past, the average size of the financial support per project was fluctuating from USD 100 up to 500 million (EDC, 2019b), more recently EDC seems to have shifted to supporting more SMEs, although the implications of these shifts on the climate impact of the portfolio are not clear. Indeed, in 2017, most EDC's customers were SMEs. EDC helps SMEs to develop the connection with the international buyers through match-making sessions and by advancing their financial relationships with foreign buyers (EDC, 2019a). This is an important development given the often-heard argument that ECAs only focus on large-scale investments and therefore cannot support smaller cleantech companies. When looking at the amount of support EDC provides however, its larger transactions are almost always to large companies. Key activities of the agency include managing the risks, securing financing and increasing working capital of exporters in order to encourage buyers in other countries to purchase Canadian goods and services. Table 1 below provides overview information of EDC's operations.

Table 1: Export Development Canada: overview of operations

Item	Description
Main services	<ul style="list-style-type: none"> • Credit insurance, • Export bonds and guarantees, • Political risk insurance, • Direct loans to buyers, • Lines of credit.
Geographical scale	Worldwide
Support restrictions	Plants, machinery, equipment and trade products must be up at least 65% canadian manufactured.
Total volume of operations	USD 104.6 billion per year total (2018)
Total support of FF projects	USD 62 billion (cumulative in years 2023-2017) according to Doukas et al. (2018)
Total support of cleantech projects (definition not specified by EDC)	USD 5 billion (cumulative in years 2012-2017) according to Doukas et al. (2018)
Countries with the greatest investments	Canada

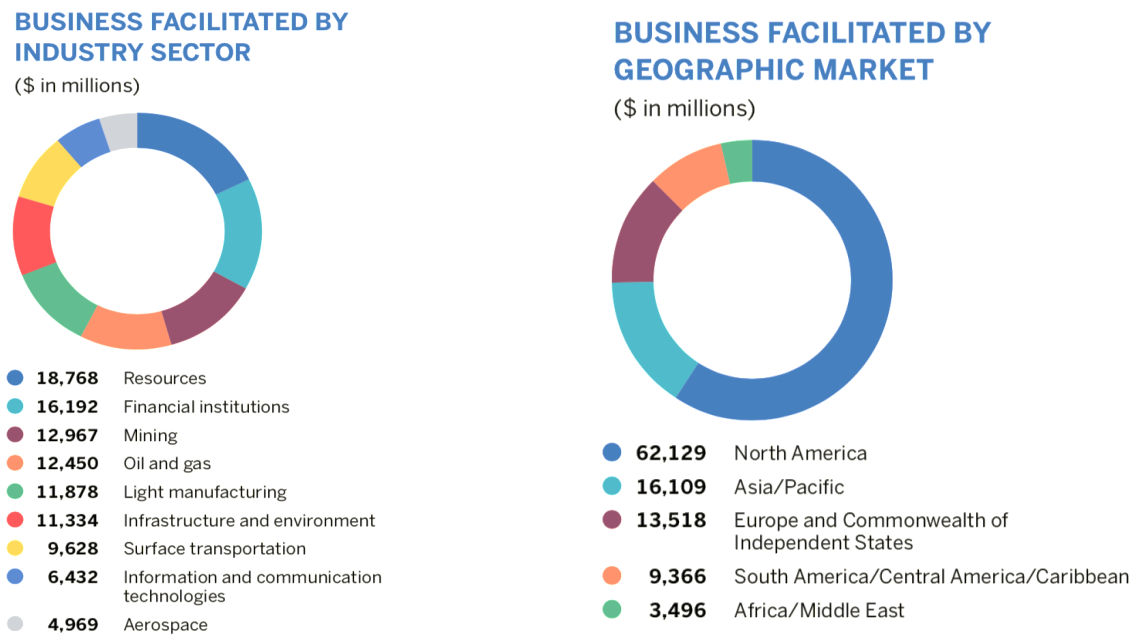
Note: Exchange rate CAD-USD: 0.76

⁵ <https://www.edc.ca>

Sources: EDC (2019a) and NRDC (2017) for fossil fuel support data

EDC customers represent a variety of industries and their businesses cover different markets around the world (EDC,2019a). According to the EDC annual report 2018 main business facilitated by sector are resources, financial institutions and mining while by geographical market main business facilitated comes from North America followed by Asia/Pacific and Europe & CIS (Figure 4).

Figure 4: EDC's operations by sector and geography in 2018



Source: EDC (2019)

3.1.2. Fossil fuel and cleantech support

In 2007-2008 due to the financial crisis, the Canadian government changed the law to enable companies to expand their support to Canadian domestic activities. Till now, the Canadian government has shown continued support for new fossil fuel infrastructure and has still not announced specific ways towards achieving its promises to phase out fossil fuel subsidies by 2025 (Government of Canada, 2017). While the financial crisis is long over, the law has not been revised to return EDC to its original mandate. According to EDC's annual reports between 2012 and 2017, the company has financed an average of more than USD 7.6 billion in oil and gas companies per year which includes around 30% support of the domestic Canadian fossil fuel companies, rather than fulfilling EDC's original mandate of export-focused international finance. Over the same period, Export Development Canada facilitated only USD 5 billion in all cleantech finance in total, which is almost 13 times less than the finance into carbon-intense companies between 2012 and 2017 (Doukas et al., 2018). Between 2012 and 2017, there was no decline in the level of supporting activities by EDC for fossil fuel companies. In 2016 due to global decline in oil prices, the company

provided extended government-backed support of up to USD 570 million to small and medium-sized oil and gas companies. In 2017, 15% of total exposure of EDC (USD 7.7 billion) was allocated to the oil and gas industry with a significant focus to support domestic activities, despite EDC's supposedly export-focused mandate (Doukas et al., 2018), while cleantech finance support reached just USD 1.14 billion.

Since Q4 of 2018, the total amount of EDC financial support has risen to USD 52.2 billion with the main focus on infrastructure and environmental activities (around 18%). In comparison, less financing was provided to oil and gas activities in 2018 (around 11.5%). It is important to note that the new Climate Change Policy does not mean EDC is "moving away from supporting carbon-intensive sectors, such as the oil and gas industry. It does mean that we [EDC] will take a more systematic and transparent approach to all sectors, including enhanced awareness and tracking of carbon intensity to factor climate change into EDC's established risk-assessment processes." (EDC, 2019g)

3.1.3. Climate-related policies and commitments of Canada

Since 2009, the Canadian government has twice presented GHG emission reduction targets (Government of Canada, 2015). In 2009 it established a target of 17% reduction by 2020, compared to 2005. In December 2015, set a commitment in its Intended Nationally Determined Contribution (INDC) to reduce GHG emissions by 30% by 2030 compared to 2005 (Climate Action Tracker, 2019a and Harper et.al., 2016). Other domestic climate policies in Canada include performance standards for coal-fired electricity generation, regulations to address methane emissions in the oil and gas sector, regulations to reduce GHGs from natural gas-fired electricity, regulations to reduce emissions from the production of chemicals and nitrogen-fertilizers, regulating hydrofluorocarbons (HFCs) and next phase of heavy-duty vehicle regulations (Government of Canada, 2015). In 2016, the Canadian government issued a long-term GHG development strategy that proposes to steadily decrease net GHG emissions up to 80% by 2050, compared to 2005. To our knowledge, none of these policies and commitments directly addresses climate change impacts of Canadian exports.

3.1.4. Climate-related policies and commitments of EDC

EDC mentioned the ratification of the PA by Canada in its climate-related policies and practices to assess and manage environmental and social risks, which are coordinated with Canada's international obligations and informed/enforced by international climate policy documents for credit exporting agencies (Government of Canada, 2019), including

- OECD Common Approaches (see section 2.2), IFC ESPS (see section 2.5) and the EPs (see section 2.4).

In 2019 EDC issued an Environmental and Social Risk Management Policy, applicable to project-related finance which covers about 3% of EDC's business portfolio. In this policy, EDC commits to

assessing and considering environmental and social risks in the transaction approval process. It further commits to actively promoting best practices with counterparts and to pursuing high standards of mitigation and monitoring of projects (GAC, 2018). EDC's policies also mention approaches to encourage clients and customers to reduce their GHG emissions by disclosing their activities and reporting carbon footprint in their Corporate and Social Responsibility (CSR) reporting. EDC works on the improvement of the MRV system to quantify emissions of carbon intensive projects and support of the activities under PA (EDC, 2019a).

EDC provides environmental and social reporting, where it is categorizing projects and considering support in the form of financing, political risk insurance, or equity to the sponsor of a project according to the OECD Common Approaches (see Section 2.2). EDC also produces a transaction table⁶.

Additionally, EDC promulgated a Climate Change Policy (EDC, 2018), which provides the company's commitments to environmental sustainability and climate change issues. This policy includes a commitment to cease loans for upstream and downstream coal as of January 2019 which goes beyond OECD CFSU (see Section 2.2.2). EDC thus shall no longer provide new:

- financing for the development, construction or expansion of coal-fired power plants (unless equipped with carbon capture and storage);
- financing for the development, construction or expansion of thermal coal mines or other projects solely focused on supplying coal-fired power plants (e.g., thermal coal terminal, rail links);
- financing to companies for which thermal coal power generation and/or thermal coal mining account for more than 40% of their revenue;
- financing for an existing coal-fired power plant unless the financing will be used to equip that facility with carbon capture and storage;
- EDC shall also begin to transition out of its credit insurance relationships with Canadian customers whose business is primarily focused on the thermal coal power generation and/or thermal coal mining sectors.

EDC states that it will continue to support oil and gas and thus is criticized by civil society (Above Ground, 2019).

3.1.5. Development Finance Institution (FinDev Canada)

Development Finance Institution (FinDev Canada)⁷ supports clients operating in developing countries by offering financing and equity investments. The institution was created by Government

⁶ <https://www19.edc.ca/edcsecure/disclosure/DisclosureView.aspx>

⁷ <https://www.findevcanada.ca/>

of Canada in 2017 and is owned by EDC under the FinDev Canada brand. FinDev Canada is thus a green tech subsidiary of EDC and is fully eligible to borrow money from EDC (FinDev Canada, 2018a). The main aim of the agency is to provide support to clients that demonstrate sustainable social and economic benefits for local communities, with a focus on job creation, women economic empowerment and climate change mitigation. Key services and products of the agency include reinforcement of the company's operations or expansion plans (e.g. purchase of equipment, facilities, acquisition processes); provision of an irrevocable guarantee to a bank for a loan to support the client's operations or expansion plans; provision of finances to develop projects with social and economic benefits for the host country; extension of flexible long-term private equity growth capital to high-potential companies by investment flows.

FinDev has a strong focus on SMEs to respond to their needs for the technical, environmental and social documentation for the project development. Priority sectors include green growth, agribusiness activities and climate change mitigation and adaptation. FinDev supports efforts from the local private sector initiatives in developing countries to address climate change. Consequently, the agency expects to expand proactive business origination in selected markets in Sub-Saharan Africa, Latin America and the Caribbean, with attention to low-income regions where needs are high.

An Interim Environmental and Social Assessment Policy was developed in the line with Canadian governments' climate change policies and highlights major approaches of FinDev climate action (FinDev, 2018b):

- engaging with clients to understand and assess the carbon and climate risks and opportunities associated with their business;
- evaluating climate change risks to ensuring that projects are designed to incorporate technically and financially feasible and cost-effective options for mitigation and adaptation to climate change;
- expecting clients (Category A and B) to provide estimates of GHG emissions using established methodologies such as the GHG Protocol and consistent with IFC ESPS.

The latter point is not specified further by FinDev and thus does not seem to have any economic or legal incentive for clients attached. FinDev's aim is generally aligned with PA targets and objectives although the magnitude of its operations and impact remain to be seen in the future. While FinDev explicitly focuses on low-carbon technologies support, the agency does not provide quantified targets related to climate change, such as GHG emissions reductions.

3.1.6. Compatibility with the Paris Agreement

From the end of 2018, EDC increased shares of financial support for low-carbon technologies and solutions, including clean technology, climate finance, and green bonds (Doukas et al., 2018) and

declared a movement out of coal power. However, EDC still allocates significant financing for domestic and foreign fossil fuel industry and mining-related sectors. Table 2 below provides an overview of EDC's policies and commitments across the dimensions of the PA alignment framework outlined in the beginning of Section 3. While EDC appears to have made important steps to start aligning its activities with the PA, a lot of work remains to be done particularly with regards to phasing out support to upstream and downstream oil and gas as well as increasing transparency regarding its carbon footprint.

Table 2: Overview of EDC's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> • Coal: commitment to cease support of upstream and downstream coal projects from January 2019 • Oil: no explicit commitments (support continued) • Gas: no explicit commitments (support continued) • Overall commitment to measure and set targets to reduce the GHG emissions intensity of portfolio from 2020
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> • Commitment to increase business activities focused on clean and low carbon technology (e.g. through FinDev subsidiary), however, with no quantified objectives
Commitments to international policies and standards	<ul style="list-style-type: none"> • Implement the TCFD recommendations and report them annually • OECD Common Approaches • IFC Environmental and Social Performance Standards • Equator Principles

Source: Authors' compilation

3.2. Denmark: Eksport Kredit Fonden

3.2.1. Overview of operations

Eksport Kredit Fonden (EKF)⁸ is the Danish ECA established in 1992. The main aim of EKF is to help Danish companies to finance their activities, cover commercial and political risks in the export markets. EKF's main services include export credits, working capital guarantees and loans. The agency provides financial support for extraordinary export risks that the private market is unable to cover and operates on a long-term perspective, in vulnerable regions where the political and commercial situation may be uncertain. Since 2015, Danish Export Crediting Agency had a strong focus on the support of SME that are now 80% of the company's customers (EKF, 2018a). Table 3 below provides overview information of EKF's operations.

⁸ <https://ekf.dk/en>

Table 3: Eksport Kredit Fonden: overview of operations

Item	Description
Main services	<ul style="list-style-type: none"> • Guarantees • Capital guarantees • Export loans
Geographical scale	Worldwide
Support restrictions	Unknown
Total size of EKF's operations	USD 13.23 billion (2018) – total portfolio of issued guarantees, reinsurance, loans and offers
Total support of FF projects	USD 12.8 million in 2017, no support in 2018
Total support of low-carbon projects	USD 7 billion (2018) according to EKF (2018a)
Regions with the greatest investments	Western Europe and Middle East (including Turkey)

Note: Exchange rate DKK-USD: 0.148; Sources: EKF (2018a) and (2019)

3.2.2. Fossil fuel and low-carbon technologies support

In 2018, wind energy projects accounted for USD 7 billion, which is more than 70% of EKF's total guarantee exposure and loans and around 75% of new guarantees in 2018 in markets as diverse as Australia, Belgium, Mexico, Senegal and Sweden. The largest transaction was made with the UK - USD 1 billion for the Hornsea wind farm. The increase in the demand for financing of large wind farms can be explained by different factors: Denmark's leading position within wind technology, construction of several offshore wind farms in Northern Europe, and the fact that onshore wind farms are becoming increasingly important focus areas for both emerging markets and developing countries.

Furthermore, agency's focus was allocated to the Power and Infrastructure sector with main regions of support in Europe, Middle East and Africa. According to the EKF Equator Principles report (Equator Principles, 2019b), in 2018, EKF did not support projects related to mining and oil & gas facilities (EKF, 2019). However, 2% of its customers in 2018 were in the oil and gas industry. This refers to the oil project in Mali that was supported in 2017 (EKF, 2020).

3.2.3. Climate-related policies and commitments of Denmark

Denmark is highly focused on the clean energy transition, has a large share of renewable energy integration in the system and focuses on energy efficiency improvement (Danish Government, 2013).

Following the elections in 2019, Denmark's parliament has approved the target to achieve net-zero emission by 2050 (Danish Energy Agency, 2019). The government issued a document titled "A Fair Direction for Denmark," which envisages new and more ambitious goal of the country to cut down GHG emissions by 70% by 2030 (Stam, 2019). The document also highlights restrictions on the sale of all new diesel and petrol cars from 2030 onwards, energy efficiency and electrification, as well as cooperation with other North Sea countries to exploit offshore wind potential (Farand, 2019). To our knowledge, none of these policies and commitments explicitly address climate change

impacts of Danish exports, although the focus on offshore wind cooperation may mean further increasing the support to the Danish wind industry by EKF.

3.2.4. Climate-related policies and commitments of EKF

EKF (2018a,b,d) highlights its commitment to international standards for corporate sustainability and climate change issues, including to OECD Common Approaches and GME, IFC ESPS and EPs. Annually, EKF reports to the UN Global Compact (EKF 2017), the OECD and the Equator Principles (EKF, 2018d) regarding EKF's CSR activities (Equator Principles, 2019a and 2019b). For the Equator Principles report, EKF uses the OECD guidance to categorize its projects (see Section 2.2).

While EKF demonstrates commitment to international environmental and climate change standards, the analysis of the company's internal policies has shown that these policies do not have specific long- or short-term goals that EKF wants to achieve (EKF, 2018c). The documents mention that EKF is trying to commit and report but there is a lack of quantified information (EKF, 2018b).

In response to parliamentary questions, the Danish minister of Business Simon Kollerup stated that Denmark should play a central and proactive role in both the EU and OECD export credit area when it comes to financing climate projects, mobilizing private capital for climate projects, transparency on how export credits contribute to the green transition and common high standards for the environment, human rights and climate in relation to the projects for which export credits are granted. He added that Denmark wants to work with like-minded people to further raise the climate ambition level in the OECD framework (Kollerup, 2020). These ambitions are yet to be followed by concrete action.

3.2.5. Compatibility with the Paris Agreement

EKF is committed to the main international policies and standards discussed in Section 2. Table 4 below presents an overview of EKF's climate-related policies and commitments across the dimensions of the PA alignment framework. Despite its focus on supporting wind power projects to our knowledge EKF does not have explicit commitments not to support fossil fuel projects. Thus, while EKF operations appear to be generally aligned with the PA, more explicit commitments and transparent reporting would be welcome.

Table 4: Overview of EKF's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> • No current support for upstream or downstream coal, oil and gas reported (last support was provided to an oil project in Mali in 2017) • No explicit commitment not to support fossil fuels
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> • Strong focus on low-carbon technologies (wind takes up 70% of support provided in 2018)
Commitments to international policies and standards	<ul style="list-style-type: none"> • OECD Common Approaches • IFC Environmental and Social Performance Standards • Equator Principles • UN Global Compact

Source: Authors' compilation

3.3. France: Bpifrance Assurance Export

3.3.1. Overview of operations

Bpifrance Assurance Export⁹ in December 2016, Bpifrance Assurance Export became the new state ECA of France by taking all the roles from the former export crediting agency of France Compagnie Française d'Assurance pour le Commerce Extérieur (COFACE)¹⁰ (Dawar, 2019). It offers credit insurance; prospecting insurance; security and pre-financing guarantees; exchange risk insurance; investment insurance (Bpifrance, 2017a), mainly to SMEs which in 2018 made up 88% of the clients (Bpifrance, 2018a). Table 5 below provides overview information on the Bpifrance Assurance Export's operations.

Table 5: Bpifrance Assurance Export: overview of operations

Item	Description
Main services:	<ul style="list-style-type: none"> • Credit insurance • Export bond and export working capital insurance • Exchange risk insurance • Investment insurance • Market prospection repayable advance
Geographical scale:	Worldwide
Support restrictions:	Coal, shale oil and gas, and routine flaring since end of 2019.
Total volume of operations	EUR 65 billion total outstanding amount in credit insurance EUR 596 million in export loans in 2018
Total support of FF projects	EUR 10.5 billion since 2009
Total support of low-carbon projects	Unknown
Average support size	Unknown
Regions with the greatest investments	France

Sources: Bpifrance (2019a); Bpifrance (2018b); <https://www.Bpifrance.com/Export-credit-Agency>

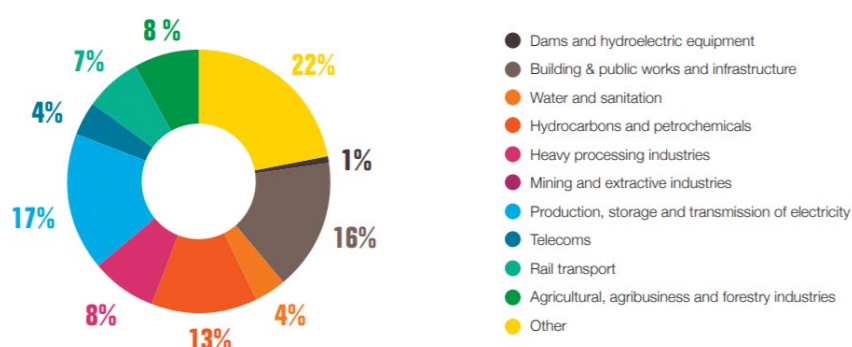
⁹ <https://www.Bpifrance.com/Export-credit-Agency>

¹⁰ <http://www.coface.ae/>

3.3.2. Fossil fuel and low-carbon technologies support

In 2018, “hydrocarbons and petrochemicals” accounted for 13% of projects that underwent the impact evaluation at Bpifrance Assurance Export (Figure 5). Since 2009, Bpifrance supported fossil fuel projects with a value of EUR 10.5 billion (Bpifrance 2019b), of which 89% supported oil and gas projects, the rest Kusile & Medupi coal plants in South Africa (Roux-Goeken 2019). Since 2016, Bpifrance has not supported coal-related projects.

Figure 5: Breakdown of projects evaluated by Bpifrance Assurance Export in 2018 by sector



Source: Bpifrance (2018a)

3.3.3. Climate-related policies and commitments of France

Under the PA, France’s commitments are part of the EU’s NDC with the target to reduce GHG emissions by 40% by 2030 compared to 1990. France’s long-term strategy aims at cutting down GHG emissions by 75% by 2050 compared to 1990 levels. In June 2019, France increased its long-term ambition enacting a law aimed at achieving carbon neutrality by 2050. According to the Government’s Climate Plan, hydrocarbon exploration will be prohibited, and France should no longer produce any oil, gas or coal by 2040.

On 28 December, 2019, the French Parliament adopted a new budget law that bans export credits for coal, shale oil and gas, and routine flaring (Parliament of France 2019). It also states that the government has to submit a new report to Parliament by September 2020 with proposals on:

- A trajectory to end export credits for the exploration and exploitation of new oil & gas fields;
- Environmental performance standards;
- Measures to boost support for renewables.

3.3.4. Climate-related policies and commitments of Bpifrance Assurance Export

Bpifrance Assurance Export's export credits are subject to OECD Common Approaches and World Bank Group requirements and should be disclosed and categorized accordingly (Bpifrance, 2019a and 2019b). It commits to disclosure and providing information about categorization of the project portfolio (Bpifrance, 2019a and 2019b), but according to its website, portfolio information is only made available to third parties by request. Bpifrance Assurance Export also commits to conduct Environmental and Social Impact Assessment for most environmentally and socially sensitive projects from Category A (Bpifrance, 2019b). Bpifrance Group's internal CSR policies (Bpifrance, 2018b) indicate specific support for Environmental and Energy Transition in form of loans to renewable energy producers and loans aimed at reducing the environmental impact of business activities (particularly relating to energy).

3.3.5. Compatibility with the Paris Agreement

According to the Bpifrance Group annual report, 2018 (Bpifrance, 2019b), the group does not support coal generation and coal related infrastructures, as well as the oil and gas sector, but recent figures show that it does support oil and gas. In contrast to other ECAs analyzed in this study, there is a lack of publicly available information regarding the sectors and projects supported by Bpifrance Assurance Export. Dufour et al. (2019) dryly states that "the climate impact of the agency's activities is neither transparent, nor systematically measured". Table 6 below provides an overview of Bpifrance Assurance Export climate-related policies and commitments across the dimensions of the PA alignment framework.

Table 6: Overview of Bpifrance Assurance Export's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> Government: recent decision not to support coal, shale oil and gas, and routine flaring Bpifrance Group: Ecological and Energy Transition program
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> Bpifrance Group: loans aimed at reducing the environmental impact of business activities (particularly relating to energy)
Commitments to international policies and standards	<ul style="list-style-type: none"> OECD Common Approaches IFC Environmental and Social Performance Standards UN Global Compact

Source: Authors' compilation

3.4. Germany: Euler Hermes Aktiengesellschaft (AG)

3.4.1. Overview of operations

Euler Hermes¹¹ is mandated to handle the export credit guarantees of the Federal Republic of Germany – also known as Hermes Cover – on behalf of the German government. The main purpose is to promote foreign trade by improving conditions and reducing risks for export companies. To this end, Hermes Cover protects German export companies against payment defaults caused by economic and political factors (Federal Ministry for Economic Affairs and Energy, 2019a). The scheme covers for risks that are not adequately addressed by private insurance providers, including exports to risky markets as well as large-volume and long-term transactions (Euler Hermes, 2017; Federal Ministry for Economic Affairs and Energy, 2019b). As such, it allows exporters to access difficult markets and maintain operations under unfavorable conditions (Hunke, 2014). In 2018, goods and services worth EUR 19.8 billion were backed by Hermes Cover, with most of them destined for emerging economies and developing countries (Federal Ministry for Economic Affairs and Energy, 2019c). The BRIC countries – Brazil, Russia, India and China – and Turkey are traditionally among the top ten countries for which guarantees are granted (Hunke, 2014; Federal Ministry for Economic Affairs and Energy, 2019c). Although the majority of companies applying are SMEs, large companies are receiving the largest volume of transactions.

The key criteria for granting Hermes Cover include the creditworthiness of the foreign buyer, country risk, German added value, customary conditions of contract and environmental, social and human rights standards (ESHR) (Federal Ministry for Economic Affairs and Energy, 2019d). The ESHR assessment is based on international standards, such as the OECD Common Approaches, the Operational Safeguard Policies of the World Bank, the Performance Standards of the IFC as well as the Environmental, Health and Safety Guidelines of the World Bank Group. For projects classified as Category A – i.e. projects that could have significant adverse ESHR impacts – due diligence requirements are higher (Federal Ministry for Economic Affairs and Energy, 2019e). In 2018, 12 projects with an order value of EUR 8.5 billion were classified as Category A (Federal Ministry for Economic Affairs and Energy, 2019f). Table 7 below provides overview information of Euler Hermes' operations.

¹¹ www.eulerhermes.com/en_global.html

Table 7: Euler Hermes: overview of operations

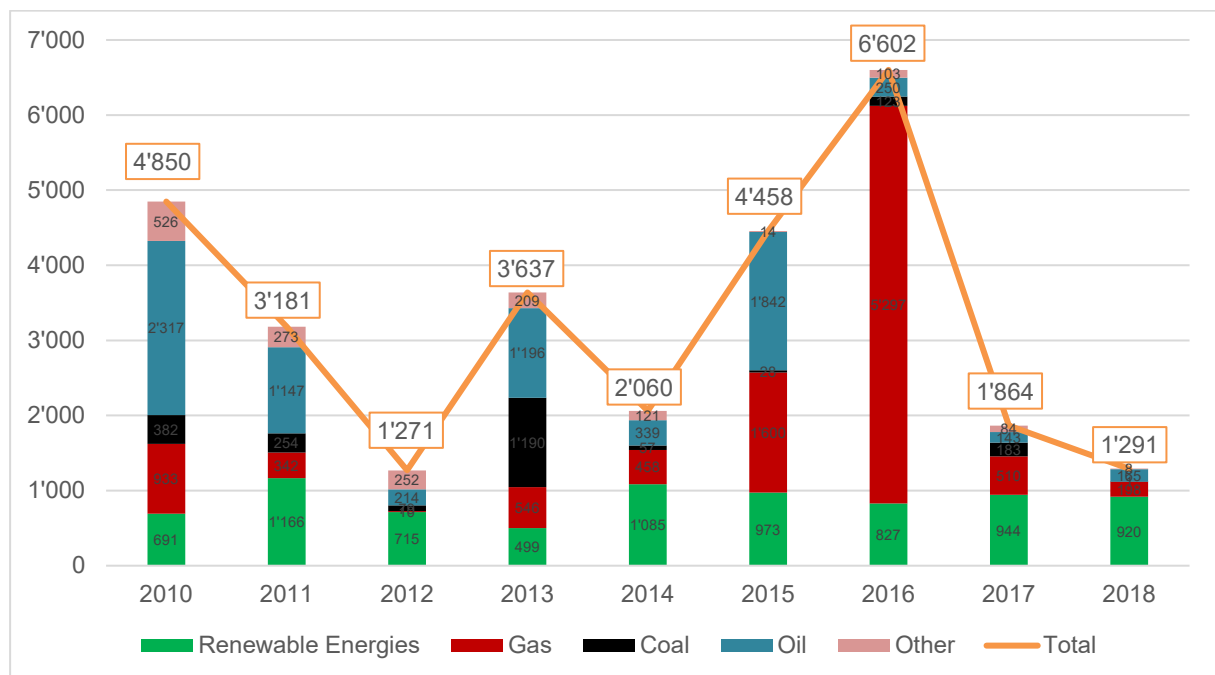
Item	Description
Main services	<ul style="list-style-type: none"> Export credit guarantees (so-called Hermes Cover) Single transaction guarantees (e.g. supplier credit cover and manufacturing risk cover) Spread policies (e.g. Whole turnover Policy) Supplementary cover (e.g. contract bond cover) Buyer credit cover
Geographical scale	Worldwide
Support restrictions	Guarantees for nuclear exports are forbidden
Total size of operations	Goods and services worth EUR 19.8 billion backed in 2018
Total support of FF projects	EUR 0.36 billion in 2018
Total support of low-carbon projects	EUR 0.92 billion in 2018
Regions with the greatest investments	Brazil, Russia, India, China, and Turkey

Sources: Federal Ministry for Economic Affairs and Energy (2019a, b, c, g)

3.4.2. Fossil fuel and low-carbon technologies support

In general, the cover volume for both fossil and renewable energy projects is subject to high volatility, particularly for the former (see **Error! Reference source not found.**). The clearly visible decline for coal is likely a direct result of new guidelines for funding coal-fired power plants (see Sections **Error! Reference source not found.** and **Error! Reference source not found.**). For oil whose share declined significantly, there is no specific policy apart from the overall commitment to promote climate-friendly exports and the causal link is therefore difficult to establish.

Figure 6: Credit guarantees in the energy sector (million EUR)



Source: Authors' own depiction, based on Federal Ministry for Economic Affairs and Energy (2019g).

3.4.3. Climate-related policies and commitments of Germany

Germany has engaged proactively in domestic as well as international climate policy since the late 1980s. It sees itself as a driving force behind the global energy transition and as a pioneer for renewable energies, both at the political and technological level (Federal Ministry for Economic Affairs and Energy, 2015). According to the Federal Ministry for Economic Affairs and Energy, “sustainability plays a crucial role in the promotion of Germany’s foreign trade and is duly reflected in the country’s cover policy” (Federal Ministry for Economic Affairs and Energy, 2019c, p. 55). It must be noted, though, that the country will most probably not meet the targets set by its own energy-transition program ‘Energiewende’ (McKinsey 2019). With regards to cutting-edge technology, the German government seeks to promote the country’s innovation potential through an increased presence on foreign markets (Federal Ministry for Economic Affairs and Energy, 2019h).

Since early 2015, Germany applies differentiated criteria for different institutions regarding international funding for coal-related projects (Federal Ministry for Economic Affairs and Energy, 2015):

a. Export / investment financing (KfW-IPEX)

- Supported coal-related projects can only take place in countries with mitigation policies that include targets for expanding renewables and/or enhancing energy efficiency;
- coal-related projects must be compatible with national mitigation policies;
- coal-related projects must deploy best available technologies in line with the current European Industrial Emissions Directive (2010/75/EU);
- new coal-fired power plants can only be financed if
 - in the case of facilities with unit sizes >500 MW, at least technologies with a planned electrical efficiency of 43% (lignite) and 44% (hard coal) are used
 - facilities with unit sizes <500 MW achieve a relative improvement of efficiency compared with the regional average and rank amongst the best 25% of the regional power plant portfolio in this size category;
 - the technical and spatial preconditions are examined with a view to possible subsequent CCS;
- new coal-fired facilities that cogenerate heat and power or generate heat can only be financed if a planned fuel efficiency of at least 75% is attained;
- the improvement or modernization of existing coal-fired power plants can only be financed if the measures result in a substantial improvement in the environmental footprint of the plant;
- coal-related projects must comply with national rules on the prevention or reduction of negative environmental and social effects;

- coal-related projects in non-EU or non-OECD countries must be subject to an environmental and social audit oriented to internationally recognised standards (e.g. by the World Bank or the EU)
- b. Development financing (KfW)
- coal-related projects must take place in countries with mitigation policies that include targets for expanding renewables and/or enhancing energy efficiency;
 - coal-related projects must be compatible with national mitigation policies;
 - coal-related projects must deploy best available technologies in line with the current European Industrial Emissions Directive (2010/75/EU);
 - new coal-fired power plants are only financed if certain requirements for efficiency are met;
 - existing coal-fired power plants are only financed if measures result in substantial improvement of the plants' environmental footprint;
 - coal-related projects must comply with national rules on the prevention or reduction of negative environmental and social effects;
 - coal-related projects in non-EU or non-OECD countries must be subject to an environmental and social audit oriented to internationally recognised standards (e.g. by the World Bank or the EU)
- c. Export credit guarantees (Euler Hermes)
- OECD rules (which are the most lenient of all...)

3.4.4. Climate-related policies and commitments of Euler Hermes

Apart from the national guidelines on funding for coal-fired plants, Euler Hermes adheres to OECD CFSU rules (Federal Ministry for Economic Affairs and Energy, 2019h). There are no similar requirements for oil and gas projects. Yet, Euler Hermes has committed itself to promote exports of climate-friendly technologies by listing the OECD CCSU as a guiding principle for granting export guarantees. In concrete terms, Euler Hermes promotes projects on renewable energy, climate protection and climate change adaptation by offering extended credit periods of up to 18 years (Federal Ministry for Economic Affairs and Energy, 2019h). The category 'renewable energy' includes projects in the fields of biogas, geothermal power, solar, water and wind (Federal Ministry for Economic Affairs and Energy, 2019g). As shown in Figure 6 above, the share of renewable energy projects had already been quite high in 2014 but fell massively until 2016, recovering only afterwards due to the absence of fossil fuel projects. In absolute numbers, the cover volume for renewable energy exports has not clearly increased in the decade up to 2018 (Federal Ministry for Economic Affairs and Energy, 2019c). Most renewable energy transactions covered by export credits guarantees are wind projects. In 2018, they accounted for 78% (720 million EUR) of the total volume for renewable energy (Federal Ministry for Economic Affairs and Energy, 2019g). As in the case of Denmark (see Section 3.2) a large share of renewable energy projects in an ECA's portfolio likely reflect the strength of this sector in the country's exports and is not a result of specifically targeted policies.

3.4.5. Compatibility with the Paris Agreement

As part of the overall intention to promote climate-friendly exports, the German export credit scheme adheres to climate-relevant OECD sector understandings, namely CCSU and CFSU. However, apart from these two policies, there are no commitments on climate change issues – notably related to the oil and gas sector. Table 8 below provides an overview of Euler Hermes's climate-related policies and commitments across the dimensions of the PA alignment framework.

Table 8: Overview of Euler Hermes's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none">• As required by CFSU, Euler Hermes applies stricter rules on exports related to coal-fired power generation• Cover volume for coal projects has declined in recent years (possibly as a result of CFSU application), but there is no explicit commitment for a full phase out• Oil and gas: no explicit commitments, although cover volume for fossil fuel projects has declined in recent years
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none">• As required by CCSU, Euler Hermes promotes exports of climate-friendly technologies• Absolute volume of renewable-related cover has not significantly increased over the last decade
Commitments to international policies and standards	<ul style="list-style-type: none">• OECD sector understandings, namely CCSU and CFSU• Global Compact

Source: Authors' compilation

3.5. Netherlands: Atradius Dutch State Business (Atradius DSB)

3.5.1. Overview of operations

Atradius DSB¹² is a subsidiary of the Atradius Group, a multinational corporation providing trade credit insurances to customers around the globe. On behalf and for account of the Dutch state, Atradius DSB manages the export credit insurance facility, the foreign investment insurance scheme, the export credit insurance and export finance facilities of the Dutch Good Growth Fund (DGGF) as well as the export credit insurance and export finance facilities of the Dutch Trade and Investment Fund (DTIF) (Atradius DSB, 2018).

In this function, Atradius DSB provides credit insurance policies intended to protect Dutch export companies against credit and manufacturing risks. Moreover, it enables banks to obtain funding for financing export transactions through an export credit guarantee scheme (Atradius DSB, 2019). Mandated by the Ministry of Foreign Affairs, Atradius DSB is also managing a portfolio of soft loans

¹² <https://atradiusdutchstatebusiness.nl/en/>

– with a total volume of approximately EUR 335 million– which are granted to developing countries through DGGF (Atradius DSB 2018, p. 5). All development cooperation activities are coordinated with Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland, RVO) which supports the business activities of Dutch entrepreneurs by providing grants, contacts and know-how (Atradius DSB, 2018a). Table 9 below provides an overview of Atradius DSB's operations.

Table 9: Atradius DSB: overview of operations

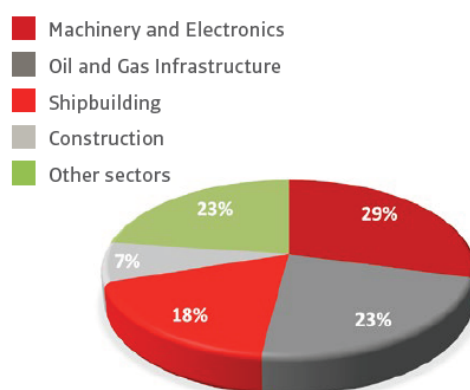
Item	Description
Main services	<ul style="list-style-type: none"> • Credit insurance policies for export companies • Export credit guarantees for banks • Soft loans granted to developing countries
Geographical scale	Worldwide
Support restrictions	Unknown
Total support of FF projects	7.28 billion EUR between 2012 and 2015 (1.8 billion EUR per year)
Total support of low-carbon projects	86 million EUR between 2012 and 2015 (EUR 21.5 million per year)
Regions with the greatest investments	Nigeria, Mexico, Brazil, the United Arab Emirates and Russia (fossil-fuel related investments)

Sources: Atradius DSB (2018, 2019) and Both ENDS (2017a)

In 2018, Atradius DSB issued a total of 123 insurance policies through the export credit insurance facility. The claims paid totaled EUR 26.6 million (Atradius DSB, 2018, p. 19). Key sectors receiving support included machinery and electronics, oil and gas infrastructure, shipbuilding and construction (Figure 7).

Figure 7: Atradius DBS portfolio composition in 2018

Portfolio composition in 2018 according to sector



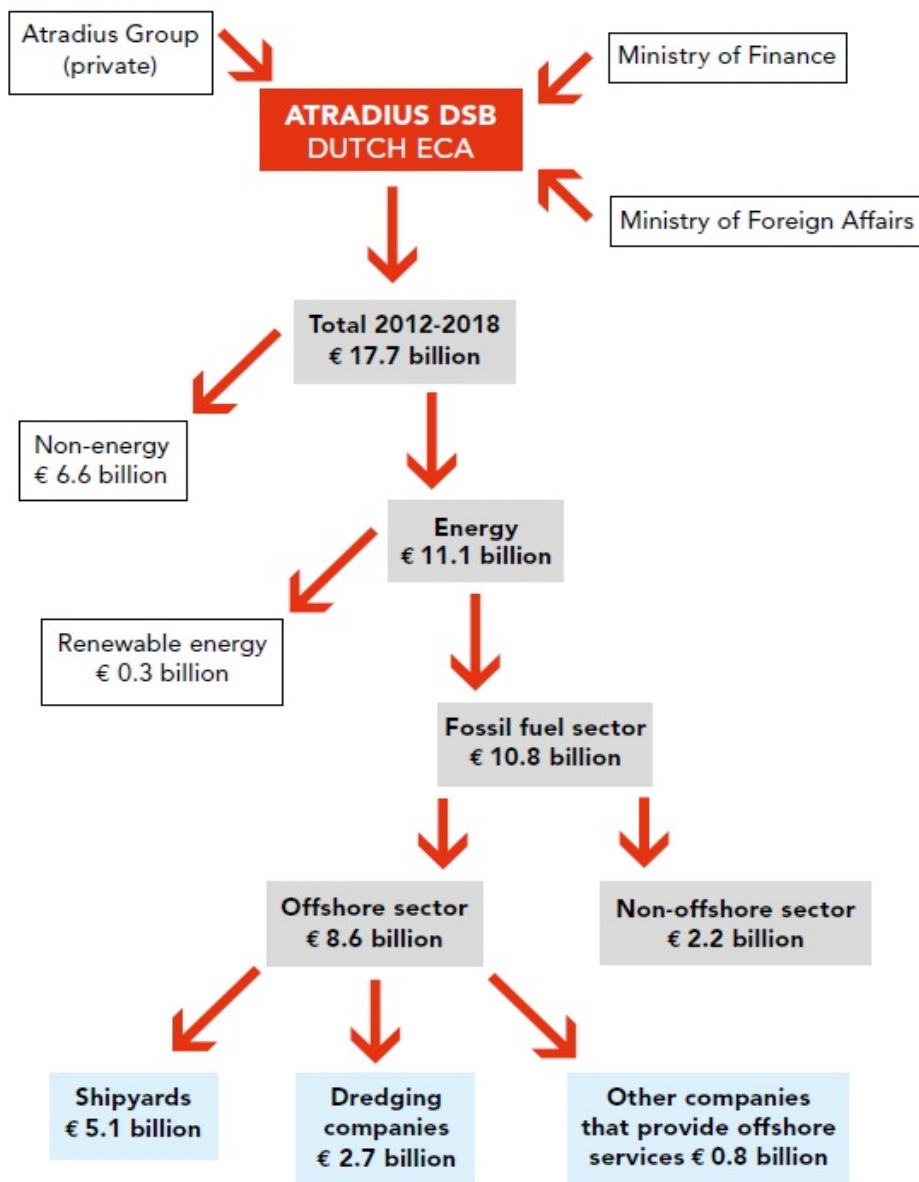
Source: Atradius DSB (2018), p. 15.

3.5.2. Fossil fuel and low-carbon technologies support

Both ENDS (2019) summarized that fossil fuel projects account for more than 60% of the total volume of Atradius DSB's portfolio. In concrete terms, Atradius DSB provided EUR 10.8 billion in

insurances and guarantees to projects related to fossil fuels between 2012 and 2018 or around EUR 1.5 billion per year (Figure 8) (Both ENDS, 2019). Fossil fuel-related export transactions accounted for 98% of the insured value for energy projects. There is a clear focus on the offshore and maritime business, with 80% of fossil fuel-related insurances and guarantees being granted to offshore companies.

Figure 8: Atradius DSB insurances for transactions in the energy sector



Source: Both ENDS (2019), p. 6.

3.5.3. Climate-related policies and commitments of the Netherlands

The Netherlands has repeatedly committed to phase out fossil fuel subsidies by 2025 and urged others to do the same. Meanwhile, the Dutch development bank, Financierings-maatschappij voor

Ontwikkelingslanden (FMO), announced to stop providing direct finance for new coal projects (van der Burg and Runkel, 2017). In March 2014, the Dutch Prime Minister and President Obama of the USA committed both to no public funding for coal abroad. While the current US administration dropped such commitments, the Dutch government never withdrew this statement.

The Dutch government has further announced that from 2020 onwards, it will no longer support coal projects as well as the exploration and development of new oil and gas fields through its foreign trade and development cooperation instruments. This policy will apply to DTIF and DGGF, but not to the export credit insurance facility, the foreign investment insurance scheme (Government of the Netherlands, 2019).

Regarding its ECA, the Dutch government has stated to continue supporting oil and gas projects while at the same time try to increase its support for renewables. The Ministry of Finance explicitly stated that “export credit insurance does not directly aim at achieving climate goals”, which is why “the ministry sees no reason to phase it out”. It is further argued that “excluding Dutch businesses from fossil-related projects that are going to take place anyway is not going to help the environment”, and that “export credit insurance [will] shift naturally towards sustainable projects in coming years” (Both ENDS, 2017b).

3.5.4. Climate-related policies and commitments of Atradius DSB

Atradius DSB has started to examine its portfolio, considering issues such as climate change, sustainability and circular economy. In 2018, it began to register export transactions that directly contribute to greening the economy as well as to meeting the Sustainable Development Goals (SDGs) (Atradius DSB, 2018). For instance, Atradius DSB has issued guarantees to Climate Investor One (CIO) – an initiative working on renewable energy in developing countries – stating that the “execution of renewable energy projects in developing countries represents interesting opportunities for Dutch exporters” (Atradius DSB, 2018, p. 9). Apart from that, Atradius DSB started to develop a method to understand the relevance of export transactions for climate mitigation and climate adaptation. This method should then be used to specify which supported projects are ‘green’ (Atradius DSB, 2018). These initiatives, however, remain scattered and there is no holistic climate change strategy in place.

3.5.5. Compatibility with the Paris Agreement

Both ENDS (2017a, p. 20) concluded that “by continuing to support business as usual in the energy sector through export credits, the Dutch government (...) effectively keeps the fossil fuel industry afloat”, which “stands in stark contrast to the commitments made under the Paris Agreement”. At the same time, Atradius DSB is one of the few ECAs to explicitly refer to the PA in its communication. For instance, the 2017 Annual Report formulates the overall intention to mobilize

capital and finance for climate projects, thereby contributing to the country's efforts to combat climate change under the PA (Atradius DSB, 2017). These announcements are yet to be translated into concrete commitments to phase out support for fossil fuels. Table 10 below provides an overview of Atradius' climate-related policies and commitments across the dimensions of the PA alignment framework.

Table 10: Overview of Atradius DSB's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> • Government announcement (2014) to provide no public funding for coal abroad • Oil and gas: no commitments
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> • Starting in 2019: register export transactions that directly contribute to Sustainable Development Goals • Renewable energy projects in developing countries are seen as "interesting opportunities for Dutch exporters" (but no concrete policy on how to scale them up)
Commitments to international policies and standards	<ul style="list-style-type: none"> • OECD Common Approaches • IFC Environmental and Social Performance Standards • United Nations Guiding Principles on Business and Human Rights

Source: Authors' compilation

3.6. Sweden I: The Swedish Export Credit Corporation (SEK)

3.6.1. Overview of operations

The Swedish Export Credit Corporation (SEK)¹³ is a state-owned enterprise taking instructions from the Swedish Parliament that ensures access to financial solutions for the Swedish export industry. However, SEK is not subject to the Swedish public access policy for government agencies and keeps the information about its clients confidential. SEK supports SMEs and large companies with sales more than USD 20 million, suppliers and export companies and foreign buyers of Swedish products and services. Activities of the company cover more than 70 countries and provide services such as: loans financing of the exporters and boosting of the exports. Table 11 below provides overview information of the Swedish Export Credit Corporation (SEK, 2019).

In 2018, SEK attracted new medium-sized companies, which increased company client's portfolio, successfully added USD 5.7 billion of new lending and increased total lending portfolio to USD 26 billion. Mostly, the agency's client portfolio consists of local companies and enterprises. As of 2018, SEK has financed more than USD 8 billion into Swedish clients from the total lending portfolio. The

¹³ <https://www.sek.se/en/about-us/>

second place is North and Latin America – USD 5.2 billion, and the third place is taken by Western Europe (excluding Sweden) – USD 3.1 billion (SEK 2018).

Table 11: The Swedish Export Credit Corporation: overview of operations

Item	Description
Main services:	<ul style="list-style-type: none"> • Financing of export credits • Guarantees, lending and funding • Secure export transactions
Geographical scale:	70 countries according to SEK (2018)
Support restrictions:	N/A
Total size of SEK's operations	USD 26 billion (2018)
Total support of FF projects	USD 52 million (2018)
Total support of low-carbon projects	USD 0.2 billion loans (SEK 2018)
Regions with the greatest investments	Sweden, Western Europe, Latin America

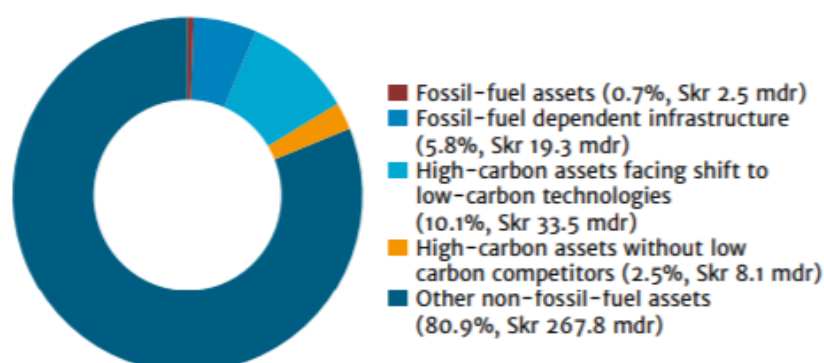
Note: Exchange rate SEK-USD: 0.10

Sources: SEK (2018) and (2019)

3.6.2. Fossil fuel and low-carbon technologies support

In 2018, SEK did not provide financial support for coal-fired power. However, due to a lack of transparency it is unclear if any credit was provided for extraction and transportation necessary for coal-fired power plants. Fossil fuel assets and high-carbon infrastructure accounted for almost 20% of its gross exposure (Figure 9). SEK uses the sector term “Carbon Asset Risks” (by the World Resources Institute (WRI)) for the method to classify exposures in SEK's lending portfolio that is sensitive to climate-related risks. As a consequence, SEK has reduced coal power projects, but not other fossil fuel projects. These projects are not in line with the PA or the ambition of making Sweden the world's first fossil fuel-free welfare state (Swedish Society for Nature Conservation, 2019).

Figure 9: SEK's gross exposures per Carbon Asset classes



Source: SEK (2018)

3.6.3. Climate-related policies and commitments of Sweden

Sweden has been a climate policy frontrunner since the 1990s, upgrading its policies repeatedly. In mid-2017, Sweden launched a climate policy framework with the aim to reach net zero GHG emissions by 2045 (Allerup, 2019). The aim of the framework is to provide coherent climate policy for implementation of PA in Sweden. The climate policy framework is very ambitious and includes three parts: a climate act, long-term goals and establishment of a climate policy council (Romson, 2017). The main goal of the Climate act is to reduce GHG emissions from all the activities in Sweden up to 85% by 2045 (Ministry of the Environment and Energy of Sweden, 2018). Table 12 provides the current Swedish climate and energy policy objectives by 2045.

Table 12: Sweden's key climate and energy policy objectives

Target	Target year	Base year
Sweden will not have any net emissions of greenhouse gases into the atmosphere and should thereafter achieve negative emissions	2045	1990
Reduction of -75 percent of emissions from sectors outside the EU ETS	2040	1990
Reduction of -63 percent of emissions from sectors outside the EU ETS	2030	1990
Reduction of - 70 percent of emissions from domestic transport	2030	2010
Reduction of -40 percent of emissions from sectors outside the EU ETS	2020	1990
50 percent share of renewable energy in gross final energy consumption	2020	
100 per cent renewable electricity production (this is a target, not a deadline for banning nuclear power, nor does mean closing nuclear power plants through political decisions)	2040	
Sweden's energy use is to be 50 percent more efficient than in 2005	2030	2005

Source: Ministry of the Environment and Energy of Sweden (2019)

Sweden's carbon tax levels for all fossil fuels, including heating oil fuels (light and heavy), natural gas and coal are the highest in the world (~USD 140 /t CO₂e in 2015) (Ministry of the Environment and Energy of Sweden, 2015).

On December 13, 2019, the Swedish government announced that it will ban export credits to fossil fuel exploration and extraction by 2022 at the latest (DeAngelis and Tucker, 2020).

3.6.4. Climate-related policies and commitments of SEK

SEK's environmental policy has highlighted the main aims and contribution of SEK towards climate change and sustainability progress, but overall it is unconditional and does not have strict timelines (SEK, 2014a and 2014b). In 2016, SEK has joined Sweden's Fossil Free initiative, restricting the support of fossil fuel projects (FOE, 2017). According to the annual report 2018, it is not permitted for a company to focus on and finance coal-fired power plants or installations. However, SEK could

provide additional loans for existing power plants to support their environmental improvement measures (SEK, 2018). It applies OECD Common Approaches and applies the rule that category A and B projects should fulfil IFC Performance Standards on ESHR and IFC Environmental, Health, and Safety Guidelines (SEK, 2014a). Furthermore, it applies OECD CFSU. and provides support for projects, which include measures for the environmental improvement. However, restrictions do not apply for the projects related to extraction of coal (Swedish Society for Nature Conservation, 2019).

Since 2017, SEK has committed to report to the EPs, but did not submit a new report neither in 2017 nor in 2018. (Equator Principles, 2019c and 2017). In 2017 and 2018, the agency specifies that lending for coal-fired power is not allowed, while total lending of the coal, oil and gas projects should not exceed 5% of the SEK's total lending portfolio, although this percentage does not include fossil fuel dependent infrastructure and other fossil fuel-dependent assets. As an exception, SEK could provide loans to fossil fuel projects, which has targets to improve fossil fuel facilities by application of low-carbon and eco-friendly technologies and infrastructures (SEK 2018).

3.6.5. Compatibility with the Paris Agreement

SEK committed to restrict the share of fossil fuel projects in its lending portfolio to 5% and SEK's operations are only marginally exposed to fossil fuels as a result. Nevertheless, the agency has no explicit commitment to phase out fossil fuel support completely. Moreover, the agency has no explicit and quantified commitments to support the low-carbon and climate resilient transition. Table 13 below provides an overview of SEK's climate-related policies and commitments across the dimensions of the PA alignment framework.

Table 13: Assessment of the alignment of SEK's policies and commitments with the PA

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> ● Sweden's Fossil Free initiative, where it aimed to restrict the support of fossil fuel projects ● Government commitment to cease support of fossil fuel exploration and extraction projects by 2022 ● Limit of 5% of the total lending portfolio for fossil fuel extraction
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> ● Increasing support of low-carbon initiatives and projects (no concrete objectives or timeline)
Commitments to international policies and standards	<ul style="list-style-type: none"> ● UN Global Compact ● OECD Common Approaches ● OECD GME ● IFC Environmental and Social Performance Standards ● IFC Environmental, Health, and Safety Guidelines ● Equator Principles (not implemented)

Source: Authors' compilation

3.7. Sweden II: The Swedish Export Credit Agency (EKN)

3.7.1. Overview of operations

Besides, SEK, the **Swedish Export Credit Agency (EKN)**¹⁴ a second agency based in Sweden with the task of promoting Swedish exports and enable more secure export transactions. EKN issues guarantees for bank's loans to both exporting companies and their buyers. EKN's guarantees include guarantees for non-payment in supplier credits, counter-guarantee, working capital credit guarantee, guarantees for banks confirmed letters of credit, discounted bills of exchange, and loans to the buyer in an export transaction. EKN works with large international corporates and small and medium enterprises to guarantee. In 2018, EKN guaranteed 682 transactions for SMEs and covered 129 countries (EKN, 2019a).

Table 14 below provides overview information of EKN's operations.

Table 14: The Swedish Export Credit Agency: overview of operations

Item	Description
Main services:	<ul style="list-style-type: none">- Guarantee for non-payment in supplier credits- Advance payment guarantee- Working capital credit guarantee- Other guarantees
Geographical scale:	129 countries
Support restrictions:	N/A
Total size of EKN's operations	USD 5.7 billion (2018)
Total support of FF projects	USD 37.3 million (2018)
Total support of low-carbon projects	N/A
Regions with the greatest investments	Latin America (Brazil)

Note: Exchange rate SEK = USD: 0.10

Sources: Swedish Society for Nature Conservation (2019); EKN (2019a); EKN (2018a); EKN (2018b)

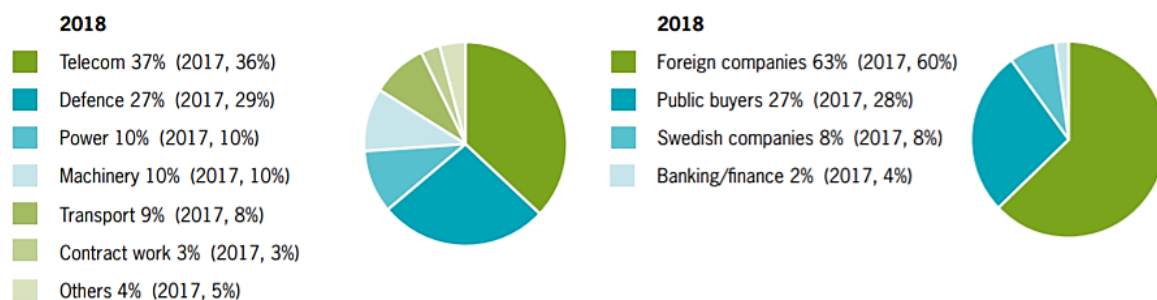
3.7.2. Fossil fuel and low-carbon technologies support

The second largest industry for the EKN's guarantees was the transport industry whose volume has trebled since 2014. The main target of the company is foreign companies, as customers of Swedish corporations. Especially, during 2018, year, the agency has provided support to Brazil, around USD 5.5 billion (EKN, 2018a).

Since July 2018, EKN has classified all transactions for fossil energy recovery as A, because of the negative climate impact.

¹⁴ <https://www.ekn.se/en/about-ekn/>

Figure 10: EKN's outstanding offers and guarantees by industry and by counterparty (2018)



Source: EKN (2019b)

In the period between 2014 and 2018, the agency has guaranteed fossil fuel projects to a total value of USD 628 million, which is equal to 2.3% of the total guarantee volume of the agency for that same period (Swedish Society for Nature Conservation, 2019).

3.7.3. Climate-related policies and commitments of EKN

EKN applies OECD Common Approaches, IFC's ESPS and The World Bank Group Environmental, Health and Safety Guidelines in assessing what environmental impacts can be acceptable (EKN, 2018a, 2019d). In 2018, EKN classifieds fossil-fueled power plants and extraction of fossil fuels (mining, oil & gas fields) as projects of category A with high environmental risks. It no more issues guarantees for the transaction of the financing for coal power plants or new industrial projects that involve coal power plants, except in developing countries and for projects involving emission-reducing technology (Swedish Society for Nature Conservation, 2019).

The ban on export credits to fossil fuel exploration and extraction by 2022 as mentioned at the analysis of SEK also applies to EKN.

3.7.4. Compatibility with the Paris Agreement

Table 15 below provides an overview of EKN's climate-related policies and commitments across the dimensions of the PA alignment framework.

Table 15: Overview of EKN's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> • As of the 31st of December 2020, EKN will no longer issue new guarantees for the financing of exports to coal mining • Government commitment to cease support for fossil fuel exploration and extraction projects by 2022
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> • No explicit commitments
Commitments to international policies and standards	<ul style="list-style-type: none"> • OECD Common Approaches • OECD GME • IFC Environmental and Social Performance Standards • IFC Environmental, Health, and Safety Guidelines • Equator Principles

Source: Authors' compilation

3.8.UK: UK Export Finance (UKEF)

3.8.1. Overview of operations

As part of the Department for International Trade, **UKEF**¹⁵ provides credit and investment insurance to protect exporters against commercial and political risks as well as against losses caused by the unfair calling of contract bonds. In addition, UKEF offers loans to overseas buyers of UK goods and services (UKEF, 2017; 2018a). The total capacity to support exports is limited to £50 billion (House of Commons, 2019a). In the financial year 2017-2018, sectors to receive most UKEF support are aerospace, construction, oil and gas, mining and metals, petrochemicals, telecommunications and transport (Government of the UK, 2018a). Table 16 below provides an overview of UKEF's operations.

Table 16: UKEF: overview of operations

Item	Description
Main services	<ul style="list-style-type: none"> • Credit and investment insurance • Loans to overseas buyers of UK goods and services
Geographical scale	Worldwide
Support restrictions	Unknown
Total size of UKEF operations	£2.5 billion in financial year 2017-2018
Total support of FF projects	£2.5 billion between 2013 and 2018 (£0.4 billion per year)
Total support of low-carbon projects	£104 million between 2013 and 2018 (£17.3 million per year)
Regions with the greatest investments	Venezuela, Bangladesh, Nigeria, Greece, Belarus, Panama Ukraine, Lebanon, Abu Dhabi, Pakistan (top 10 markets for export insurance)

Sources: UKEF (2017, 2018a, b), Government of the UK (2014) and House of Commons (2019a)

¹⁵ <https://www.gov.uk/government/organisations/uk-export-finance>

3.8.2. Fossil fuel and low-carbon technologies support

Echoing the public criticism on UKEF's support for fossil fuel energy projects overseas, the House of Commons Environmental Audit Committee (EAC) launched an inquiry into UKEF in 2018 (House of Commons Environmental Audit Committee, 2019a). According to this report, UKEF provided £2.6 billion for export transactions in the energy sector between 2013 and 2018. Of this, 96% – £2.5 billion – were spent for fossil fuel projects, particularly in low- and middle-income countries. Only 4% – £104 million – went to the renewable energy sector. Between 2013 and 2017 UKEF's support to the energy sector grew from £392 million to £919 million but decreased to £250 million in the financial year 2017-2018 (ibid.). According to the EAC Chair, Mary Creagh, the support for fossil fuel projects in low- and middle-income countries means that UKEF actively contributes to “[locking poorer countries] into dependency on high carbon energy for decades to come” (Parliament of the UK, 2019). Also, two gas power projects of ENKA UK in Iraq were questioned, for which the construction company got a support of £88 million (Parliament of the UK, 2019).

When submitting the data required for the EAC inquiry, UKEF stressed that its support is driven by demand, and that “the volume and proportion of (...) support for UK exports in specific sectors is to some extent a reflection of prevailing private sector liquidity and risk appetite” (UKEF, n.d.). UKEF further argued that the need for support for renewable energies is lower than for fossil fuels because there is already a considerable amount of liquidity available for renewable energy projects (House of Commons Environmental Audit Committee, 2019a).

The House of Commons International Development Committee (2019) separately commented on UKEF e. In October 2019, the UK Government responded to the EAC inquiry into UK Export Finance (House of Commons Environmental Audit Committee, 2019b). The EAC had recommended that UKEF phase out all fossil fuel support by 2021. The Government rejected this, as well as all other suggestions to remove fossil fuels from the UKEF portfolio. The Government instead proposed some small, essentially cosmetic changes. From the financial year 2020–21, UKEF will disclose this information in respect of projects which UKEF is asked to support which have a medium potential of adverse environmental and/or social impacts (Category B), as well as the Category A projects they already disclose. UKEF also said they will adopt some of the TCFD recommendations, ‘as appropriate to an export credit agency.’

3.8.3. Climate-related policies and commitments of the United Kingdom

The UK is renowned worldwide for being a climate policy pioneer, particularly regarding domestic long-term emissions budgets. It has repeatedly announced to phase out fossil fuel subsidies by 2025. In 2018, the government published its 25 Year Environment Plan, stating that the UK “intends to take on an even more prominent international role in protecting the planet” (Government of the UK, 2018c, p. 19).

3.6.4 Climate-related policies and commitments of UKEF

UKEF applies the OECD Common Approaches and the Equator Principles. In the pre-issuance process, UKEF also assesses a project's alignment with IFC ESPS (Government of the UK, 2018b).

According to the Minister of State for Trade and Export Promotion Baroness Fairhead, UKEF reviewed its policies with regard to the PA (House of Commons Environmental Audit Committee, 2019a). UKEF then agreed to support the Powering Past Coal Alliance (PPCA) founded by the UK and Canada in 2017. PPCA members have committed "to accelerate clean growth and climate protection through the rapid phase-out of unabated coal power" (PPCA, 2017). In her statement to the EAC Committee, Baroness Fairhead claimed that UKEF's activities are in line with the PA, which is why the government did not see the need for immediate changes other than committing to PPCA (House of Commons, 2019). Similarly, the UK government stated that ending fossil fuel investments in the near term would be too abrupt (Baynes 2019). But on January 19, 2020, Boris Johnson pledged to end all support for coal fired power plants and coal mines abroad (Hymas; 2020).

3.6.5 Compatibility with the Paris Agreement

House of Commons International Development Committee (2019b, p. 5) concludes that "the support provided to the fossil fuel economy in developing countries by UK Export Finance is damaging the coherence of the Government's approach to combating climate change". With reference to both reports, a cross-party group of 28 Members of Parliament (MPs) criticized the UK government for "actively undermining its own investment in tackling the climate emergency by continuing to fund fossil fuels through aid and export finance" (McVeigh 2019). This criticism is shared by NGOs like WWF and Amnesty International.

The EAC acknowledges that by supporting the PPCA, UKEF has shown some willingness to address issues related to the climate impacts of its export support schemes. However, UKEF does not have any concrete policies or commitments to phase out the support for fossil fuels. It is argued that in order to be fully in line with the UK's commitments under the PA, "the UK Government should set out how UKEF will work towards net-zero emissions by 2050" (House of Commons Environmental Audit Committee, 2019a, p. 26). This might require substantial changes in the regulatory framework and mandate, given that "within the statutory purposes of UKEF there is not a developmental or environmental statement in there at all" (Parliament of the UK, 2019). Table 17 below provides an overview of UKEF's climate-related policies and commitments across the dimensions of the PA alignment framework:

Table 17: Overview of UKEF's climate-related policies and commitments

Dimension	Key policies and commitments
Scaling-down and ceasing operations not consistent with the PA	<ul style="list-style-type: none"> • UKEF supports the Powering Past Coal Alliance (PPCA) which commits to the rapid phase-out of unabated coal power • UK government committed to end overseas coal support
Contributing to low-carbon and climate resilient development	<ul style="list-style-type: none"> • No explicit commitments beyond the recent announcement to promote the support export transactions on climate change adaptation and resilience
Commitments to international policies and standards	<ul style="list-style-type: none"> • OECD Common Approaches • IFC Environmental and Social Performance Standards • Equator Principles

Source: Authors' compilation

4. Conclusions

ECAs are a hitherto under-researched contributor to lock-in of fossil fuel infrastructure. This study reviewed external policies and standards as well as internal policies and commitments that may affect ECAs' portfolios – specifically their support to fossil fuel and low-carbon technology projects. Among the international policies and standards of institutions like OECD and IFC or initiatives like the Task Force on Climate-related Financial Disclosures and Equator Principles reviewed in this study, most of them are applied on a purely voluntary basis. Moreover, they are mainly focused on increasing transparency and promoting social and environmental safeguards while not directly affecting the ECAs' portfolios. Most importantly, none of them has explicit requirements to phase out support to fossil fuels and align operations with the Paris Agreement. The standards thus do not support fossil fuel project support phaseout.

Most ECAs claim adherence to some or all of the international policies, standards and guidelines reviewed in this study (Table 18). This may lead to increased transparency of information – for example, regarding projects that have negative environmental and social impacts. However, it does not necessarily lead to the reduction of support for fossil fuel projects and a broader shifting of the ECAs portfolios away from fossil fuels and towards low-carbon projects. Only few of the countries covered in this study made explicit commitments and put in place policies that may affect the portfolios of their ECAs with regards to their support for fossil fuels, notably France put in place some restrictions on oil support, while Sweden committed to cease support for fossil fuel exploration and extraction projects by 2022. More recently, other governments like the UK made generic announcements to cease such support but have not yet put them in legal text.

With regards to internal climate change policies and commitments, most of the ECAs reviewed in this study have made broad statements and commitments related to social and environmental sustainability – mostly through their CSR strategies and reports. However, only a few ECAs made explicit commitments related to climate change and most importantly to phasing out support for fossil fuels (Table 18). Only Canada's EDC seems to have a dedicated Climate Change Policy, but even that policy only affects support for coal projects but not oil and gas. Furthermore, it is limited to loans, and does not address insurances or guarantees. Nevertheless, EDC's commitments could be seen as a precedent for establishing similar approaches in other ECAs and also for expanding them to include ceasing support for upstream and downstream oil and gas. Other ECAs integrate climate change under broader environmental issues in their general CSR policies. While most ECAs have made at least some commitments related to coal, only a few of them made such commitments for the oil and gas sector (usually with no concrete timeline). Overall, most ECAs seem to be at a very early stage of taking climate change considerations seriously and integrating them into their business strategies or global value chain. As a result, many of the reviewed ECAs still provide significant support to fossil fuels and little support to low-carbon technologies. None of the ECAs reviewed in this study is therefore in line with the long-term objectives of the Paris Agreement.

Generally, the sectoral focus of ECAs is naturally determined by the largest exporting industries of a given country. This may explain both large scale support for fossil fuels – e.g. oil and gas for the Netherlands – and support for low-carbon technologies – e.g. wind power in Denmark and Germany. ECAs with high share of support for low-carbon technologies thus seem to be driven by the strength of the industry in a given country and resulting demand for export support rather than explicit mandates and climate change commitments.

Table 18: Comparison of ECAs' climate change commitments

ECA	Coal	Oil	Gas	Low-carbon technologies	International standards commitments
Export Development Canada (EDC) (Canada)	Commitment to phase out upstream and downstream coal support from January 2019 (applies to loans)	Continued support, no phase out commitments	Continued support, no phase out commitments	Established a dedicated cleantech subsidiary (FinDev)	Commitment to major international standards MRV system for portfolio GHG from 2020
Eksport Kredit Fonden (EKF) (Denmark)	No support, but no explicit commitment	Last oil project supported in 2017, no explicit commitment	No support, but no explicit commitment	Strong support to wind projects (70% of guarantees and loans in 2018)	Commitment to major international standards
Bpifrance Assurance Export (France)	Commitment to cease support to coal projects	Continued support, however with some minor limitations	Continued support, however with some minor limitations	Explicit commitments to support the low-carbon energy transition	Commitment to major international standards
Euler Hermes (Germany)	Restrictions as per OECD, but no explicit commitment	Continued support, no phase out commitments	Continued support, no phase out commitments	Strong support to renewable energy (71% of guarantees in the energy sector in 2018)	Commitment to major international standards
Atradius Dutch State Business (Netherlands)	Commitment to cease support to coal projects	Continued support, no phase out commitments	Continued support, no phase out commitments	No explicit commitments	Commitment to major international standards
The Swedish Export Credit Corporation (SEK) (Sweden)	Commitment to cease support to coal projects	Limit 5% lending to fossil fuel extraction and commitment to cease support to fossil fuel exploration and extraction by 2022.	Limit 5% lending to fossil fuel extraction and commitment to cease support to fossil fuel exploration and extraction by 2022.	Increasing support of low-carbon initiatives and projects, however no concrete objectives or timeline	Commitment to major international standards

ECA	Coal	Oil	Gas	Low-carbon technologies	International standards commitments
The Swedish Export Credit Agency (EKN) (Sweden)	Commitment to cease support to coal projects, coal mining support phase out from end-2020	Commitment to cease support to fossil fuel exploration and extraction by 2022.	Commitment to cease support to fossil fuel exploration and extraction by 2022.	No explicit commitments	Commitment to major international standards
UK Export Finance (UKEF) (UK)	Commitment to the PPCA and cease support to coal projects	Continued support, no phase out commitments	Continued support, no phase out commitments	No explicit commitments beyond the announcement to promote the support on adaptation and resilience	Commitment to major international standards

Many of the ECAs reviewed in this study seem to strongly support SMEs – e.g. Canada, Denmark, France, Germany and Sweden. The often-heard argument that ECAs are not fit for supporting low-carbon technologies exports – which is usually related to considerably smaller companies than fossil fuels – is therefore invalidated. The experiences of Denmark and Germany demonstrate that ECAs can successfully shift their portfolios towards supporting low-carbon technologies and specifically renewable energy.

With regards to the overall transparency of ECAs' operations, the study confirmed the lack of publicly available information particularly related to GHG emissions impacts of their operations. Notably, there is no comprehensive and fully comparable data on ECAs' support for fossil-fuel projects. Moreover, there are no universally used definitions of sectors and financial support metrics. This complicates making comparisons between ECAs. Moreover, to our knowledge none of the ECAs reviewed in this study provides public information on the carbon intensity of their financial portfolios. Only Canada's EDC committed to providing such information starting in 2020.

5. Policy recommendations

Climate-compatible development is not the main mandate of ECAs, but support of the national export industry. Nevertheless, being public finance institutions, ECAs' financial support is effectively comparable to subsidies. As public finance institutions ECAs must be aligned with their governments' climate change mitigation commitments, which is not the case, as shown by this study. In this situation government backed ECAs do undercut the climate change mitigation efforts abroad that the very same governments try to achieve through public climate finance and domestic emissions mitigation. As shown by the European Investment Bank (EIB) which in November 2019 decided to stop financing of oil, gas and coal projects after 2021 (EIB, 2019), public finance institutions cannot be market neutral and must be used to play an active role in the low-carbon transition. Moreover, in November 2019 the EU Parliament issued a COP25 resolution calling the Member States to apply the same principle as applied by the EIB when it comes to export credit guarantees (EU Parliament resolution 2019/2712(RSP)).

In order to ramp up the decarbonization of ECAs, we recommend the following to national governments:

- At the very minimum, national governments must introduce policies mandating their ECAs to only finance activities in line with their NDCs, the NDCs of the host countries where ECAs support business operations as well as with their bi- and multilateral climate finance. Thus, if the NDCs include a phase-out of coal, upstream and downstream coal projects must no longer be eligible for ECAs' support. Obviously, with regards to the overall target of the Paris Agreement, the phase-out of ECA support for new fossil fuel infrastructures in general, i.e. oil and gas, as soon as possible would be warranted.
- National governments must increase transparency of their ECAs, notably making publicly available the information related to their support to carbon-intensive activities and associated GHG emissions of their portfolios. Climate-related disclosures in line with the TCFD recommendations must be mandatory for ECAs.
- The start some governments/ECAs have made in aligning ECAs with the PA must speed up. Willing countries must join up and define a fossil fuel support phase out pathway together in line with the long-term objectives of the Paris Agreement.

With regard to specific regional approaches and policies, we would recommend that:

- The EU governments take initiatives to ensure the EU policies for ECAs are reflecting the EU's own climate policies as well as well the long-term decarbonization objectives as it was already done by the EIB. Thus, technologies that would no longer be "investable" under the EU NDC should also be excluded from the ECA portfolios of EU member states.
- The OECD member states should pressurize the OECD to strengthen its Coal-Fired Electricity Generation Sector Understanding (CFSU) beyond the current threshold of 750g CO₂/kWh of electricity produced, ideally to exclude any new coal power investment, and

significant life extensions of existing coal power plants. EU governments should also promote an expansion of this understanding to all coal related projects and also be expanded to the oil and gas sectors.

Beyond policy recommendations we suggest to expand this study for all OECD country ECAs. While this study probably looked at the “greenest” ECAs, a study on the rest will likely show significant misalignment of ECAs with the Paris Agreement and highlight the urgency and scale of the problem.

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